

# MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL  
RAILROAD AND FINANCIAL NEWSPAPER.

## CONTENTS.

### EDITORIAL.

A Bill to Destroy an Industry	5
The Ramie Fibre	6
Steady Progress—List of all industries established in the South during the past three months	7, 8, 9, 10
Editorial Notes	5, 6

### CONSTRUCTION DEPARTMENT.

Full particulars regarding all industrial enterprises organized in the South during the past week	39-43
Burned	43
Building Notes	43, 44
Machinery Wanted	44

### INDUSTRIAL NOTES.

Chattanooga Iron Market Report	12
Trade Notes	52
Illustrated Descriptions of Machinery	47, 61
Iron Market Report	70
Eastern Lumber Markets	74

### RAILROAD DEPARTMENT.

Railroad Construction	37
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### CORRESPONDENCE AND NOTES.

Pyrites Ores in the Southern States, VII	6
The Cotton-Seed Oil Discussion	11
An Agricultural Sub-Treasury	11
Bristol, Tennessee-Virginia	13
Fort Payne's Progress	13
Lake Spring—An Attraction of Salem, Virginia	14
San Antonio, Texas	14
Progress at Florence, S. C.	14
Edison's Proposed Investigations	15
Bridgeport, Ala.	15
Southern Timber Lands	37
Proposed Work of the Georgia Saw Mill Association	44
The Compound Lard Bill	44
A New Field in the Great Craig Mineral Region, Va.	60
New Enterprises at Greensboro, N. C.	60
An Alleged Steel Revolution	60
Grand Rivers, Ky.	75

### FINANCIAL DEPARTMENT.

New Banks	37
Bonds, Stocks and Other Notes	37, 38

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Baltimore, March 29, 1890.

# Classified Index of Advertisers.

[FOR ALPHABETICAL INDEX WITH PAGES, SEE PAGE 69.]

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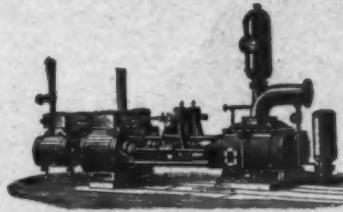
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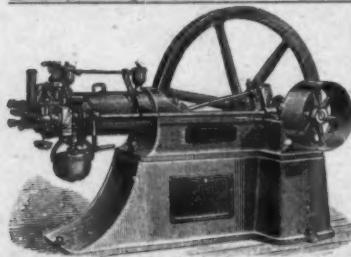
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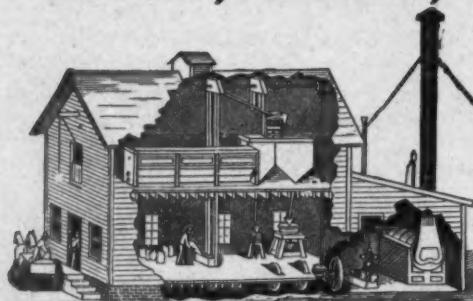
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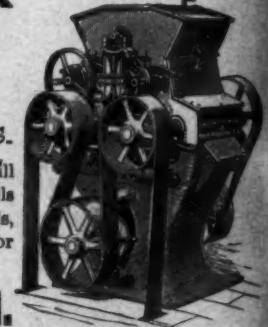
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# MANUFACTURERS' RECORD

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BALTIMORE, MARCH 29, 1890.

In a pleasant note to the editor, which was published in January, Vice-President Morton said: "I have read with pleasure recent statements in the MANUFACTURERS' RECORD bearing upon the renewed prosperity and rapid development of new enterprises in the South." That this was no mere compliment, but that it expressed the full meaning of the writer, is evidenced by what the Vice-President said to a representative of the Washington Post, upon the return of the former from a brief trip to Florida. Among other replies to his questioner was the following:

I think that the wonderful and rapid recovery of the South from the devastation of the war is most amazing and must strongly impress every one who knows what the South experienced and realizes what it is to-day. I am frank to say that I do not believe a traveler going through the South, if unaware of the struggle of twenty-five years ago, would notice any signs resulting from that struggle. Of course this recovery is not equal at all points. Some cities are more backward than others, and yet I believe that all cities are feeling the general prosperity which is now the happy condition of the South. Atlanta, Savannah, Birmingham and Jacksonville are particularly flourishing. Jacksonville has in four years increased its population from 35,000 to 60,000. This is marvelous growth.

SEVERAL contributions to the cotton-seed oil discussion appear in this issue in interesting letters from gentlemen of much practical experience and a wide knowledge of the subject.

### A BILL to Destroy an Industry.

Repeated attempts have been made to secure the passage of a law that would subject manufacturers of all preparations of lard which contained any other fat than hog's grease to regulations similar to those that govern the oleomargarine trade. A bill of this character is now pending in Congress, and there is a determined effort to force its passage. The advocates of this measure are the hog packers and lard renderers. These people, according to their own showing, are anxious only for the public welfare, which they claim will be promoted by putting on every package of compound lard a label telling exactly the contents. Lard is lard, say these worthy men. It is a pure, natural food. Everybody knows what it is; but when we come to these compounds of hog fat, stearine and cotton-seed oil, that's quite another matter. The people are cheated and must be protected. Either compel manufacturers to abandon the business, or else to label their packages with a formulae of their contents. Such, in substance, is the plea of these unselfish and public-spirited packers and renderers. This is one side of the story, but not the whole of it by a great deal. In the light of the voluminous testimony given at former and at recent hearings, the motives of the advocates of this law are apparent.

In the trade evolution of the past forty years lard is no longer the soft, sweet grease that was once tried from the leaf fat of hogs. Comparatively little of that is now made. But the great rendering tanks in which the work is done are filled with all fatty parts of the animal—the head, feet, intestines, everything goes in—and the product is what these ardent advocates of pure food foist upon the public as "prime steam lard." Some of it may be clean and pure, but if a tithe of the evidence given as to the use of hogs that have died of disease or by some accident of travel be true, the people may well pray to be excused from using the "pure food" thus produced.

Another evolution in the lard trade is the outgrowth of the immense exportation of this article. This is of comparatively recent origin. In filling orders for lard the manufacturer must take into account the climate of the country to which it is to go. If to the West Indies or the Southern Mediterranean it must be much harder than if the demand comes from Norway or Sweden. It thus came about that the demands of commerce led to various preparations of this food staple for its better keeping in other climates. From this evolution came at last that commercial article called refined lard, at which the proposed legislation is especially directed. This lard is composed of hog fat, of beef stearine and of cotton-seed oil. These are refined separately, and then are carefully commingled and put into packages, and this compound is called refined lard, a correct and truthful name for it. This is a pure food, and a great improvement upon much of the stuff called lard that comes from the packing-house tanks. This refined lard is known all over the world, and has been so long in use that the name has become a valuable trade-mark. No complaints have ever been made against it by merchants, or consumers, or boards of health, or physicians.

It has become one of the great staples of export, and is in general use in this country. To attack it at this late day is an outrage to the public as well as to the manufacturers. When the first assault was made some years since, intimations were thrown out that this lard compound was unhealthy, but this was soon so fully disproved, while the foulness of much of the material that went into the renderer's vats was exposed, that line of attack was exposed, that that line of attack was speedily given up. The packers and renderers, forced to abandon position after position, have made their final stand on the bill now pending. Should they secure its passage a dangerous precedent would be established, for when trade rivals find that it is possible to obtain Congressional legisla-

tion for or against any article, they will be only too eager to take advantage of it. The regulation of all such matters should be left to the respective States. Congress has no right to meddle with the subject, and if the right existed it would be impolitic to use it.

To the South this proposed legislation is of very great importance. The immediate effect of the passage of the bill would be to cut down the foreign demand for refined lard, and that in turn would re-act upon the demand for cotton-seed oil and cause a material falling off in its value. We are not of those who think that this great business would be destroyed by such legislation; for, in time, people would get to know the new name and to use it again freely. But there is no necessity for any action whatever, and the taking of it as is proposed would greatly disarrange a large, well-established and profitable business and give a heavy set-back to the cotton seed oil industry, and decrease by at least 5 per cent. the value of the next season's cotton crop.

Instead of the title given it by its author, the bill now pending should be styled "An Act to Destroy an Industry." That would truthfully and satisfactorily describe both the motive for its inception and the effect of its action.

We note with pleasure that the Southern press and many of the important commercial organizations of the country are manifesting vigorous opposition to this bill. That is as it should be. Every influence that can properly be brought to bear should be employed to defeat this unwise measure.

THE financial papers of Great Britain are giving a good deal of attention to the American Association and the Middlesborough Town Co. The Town Co.'s shares (of which the par value is £20) are now selling in London at £42. The London papers are commanding the stock as an unusually good purchase either for investment or speculation even at the present figures.

**The Ramie Fibre.**

Ramie can be grown in many countries, but its successful culture in any other than Eastern lands, where cheap labor abounds, depends upon the invention of some economical mechanical method of decortication. The ramie fibre, grown in a hot climate, is not so good as that in a more temperate region, and, for this reason, it will not be a profitable crop below the cotton belt, and neither will it be remunerative much north of that section. We clip the foregoing from a column on this fibre in the Boston Commercial Bulletin, in which an account is given of the new processes for ungumming, bleaching and dyeing it. In the first two of these new processes there is a loss of from 5 to 15 per cent. in weight as compared with 35 to 40 per cent. by ordinary methods. The fibre comes from the cold bleach as white as snow, and is stronger than that which has undergone a long boiling with English chemicals.

The decorticator is now the great need. The prize of £5,000 offered by the Indian government is still uncalled for, awaiting the advent of the practical inventor.

The article concludes with the following information and suggestions:

With some modification of the worsted combs, the long fibres of the ramie can be combed out and the noils left can be spun advantageously on cotton machinery. Ramie has already found a place in the manufacture of plush and upholstery goods, and the improvements in the methods of ungumming will largely increase its use for these goods, while it seems destined to compete with both wool and flax in the manufacture of many fabrics. Contracts for several thousand tons of Chinese stripped ramie fibre have been given at a cost of 8 cents per pound, and it is stated that the garneted fibre ready for the cards will cost not over 16 cents. If China will furnish the fibre at such figures it would seem that the want of a mechanical decorticator will not be an insurmountable obstacle to the extended use of the fibre.

It is also hoped that these new processes will have a stimulating effect on the cultivation of flax in this country. It is said that flax can now be mowed like grass and taken to the mill like hay, where by the same process as applied to ramie it can be readily prepared for the cards, thus avoiding all those expensive preparatory processes which have heretofore stood as a bar to the successful cultivation of flax in this country. The cultivation of flax would doubtless lead to the establishment of a linen weaving industry here which is ardently to be desired. Parties interested in the new processes are buying flax tow in Scotland at 4½ cents per pound; duty and freight added the cost is 6 cents, and allowing 2½ cents for bleaching and 3 cents for garneting, they will have it ready for the cards at a cost of 11½ cents (about the cost of middling cotton), which they think will enable them to realize a handsome profit in the manufacture of linen goods.

**THE recent announcement** that furnaces to make Bessemer iron will be erected at Greensboro, N. C., has directed widespread attention to that town, and people are wondering why, with its extraordinary advantages and attractions, it has not taken on a "boom" long ago. The company that has inaugurated the development (the North Carolina Steel & Iron Co.) expects to have its land platted and lots for sale in a few weeks.

**Pyrites Ores in the Southern States.****With Reference to Their Economical Use for Sulphuric Acid Manufacture.**

BY W. H. ADAMS, M. E., TOLERSVILLE, VA.

[For the MANUFACTURERS' RECORD.]

No. 7.

In the first article of this series there were three questions asked pertinent to the subject in hand.

The first one, with regard to brimstone, I have attempted to answer by placing in a condensed shape all necessary data which will enable the reader to form his own conclusions as to possibilities of present and future supplies, costs, changes and modifications in the securing of stocks of raw material from foreign countries or from our own country.

The second question has been answered in part by a detailed statement of values, constituents, markets, locations and extent of the developed and well-known producing and non-producing pyrites mines of the world.

In further elaboration of this second question there remains the necessity of applying the details so brought together with such suggestions as will excite additional and closer experiments in the Southern States, where to-day there is every incentive to investigate, improve, change and cheapen all costs of manufacture of sulphuric acid and other materials into which sulphuric acid enters.

Owing to the uncertainty of securing supplies and the fluctuations in price of brimstone, which must for many years be expected in our markets, pyrites offers the solution of this problem with us as it has already settled so many problems in the old world. This must be seen to be a fact for the reason that ores suitable for acid making are found so widely distributed over the Southern States; they are obtainable in definite quantities by the expenditure of our own monies in our own way and to the direct benefit of our own people, with the minimum of transportation, which, on bulky or extra hazardous materials or chemicals, has already been so great a tax on the inland districts of the South.

As an average example of the benefits to be hereafter derived in the Southern States from utilization of the pyrites found within easy distance of the great distributing centers of trade, let us take the case of a works located at Atlanta, Ga., and I trust the data given heretofore, taken from the practice of old and new world works, will be understood to be the basis for the statements now to be made.

## COST OF SULPHURIC ACID MADE FROM BRIMSTONE IN ATLANTA, GA.

Four tons brimstone, all costs including freights, losses in transit, burning, etc., at \$24 per ton (product is 18 tons chamber acid daily, or 18x322=6,000 tons yearly) \$ 96.00  
Nitrate soda, 6% of brimstone used, or 538 lbs. daily, at \$2.50 per 100 lbs. 13.45  
Labor, 5 men, all purposes, at \$1.25 per day 6.25  
Coal, 2 tons daily, at \$3.00 per ton 6.00  
Superintendent and office cost 6.00  
On works costing \$35,000, at 10% wear and tear, or \$7.65 per ton of chamber acid 10.00

Total..... \$137.70

## COST OF PYRITES ACID MADE AT ATLANTA, GA.

Ten tons pyrites, all costs as above, at \$5 per ton (product is 18 tons chamber acid, as above) \$ 50.00  
Nitrate soda, 4½ per cent. on sulphur contents, or 500 lbs., at \$2.50 per 100 lbs. 10.00  
Coal, 2 tons daily, at \$3 per ton. 6.00  
Labor, 5 men for all purposes, at \$1.25 per day. 6.25  
Superintendent and office cost 6.00  
Wear and tear, as above 10.00

Total..... \$ 88.25

Or \$4.90 per ton of chamber acid.

This would compare in a business way for one year's working as follows:

Production of brimstone plant for one year is 6,000 tons chamber acid, at cost of \$7.65..... \$ 45,900

Production of pyrites plant for one year is 6,000 tons chamber acid, at cost of \$4.90..... 29,400

Yearly difference in favor of pyrites... \$ 16,500

Or about 36 per cent. in favor of pyrites.

Now, if we take the life of a works of this class in the Southern States (in above statement we have charged off ten per cent. yearly for depreciation), the differences in favor of the pyrites plant in ten years would be \$165,000. This sum, which is over and above the profits now produced by the use of brimstone, is sufficient to pay for the entire works each three years, or to double the works each two years of working, provided selling prices of the manufactured products were not materially reduced.

The facts should be strongly emphasized that pyrites can be laid down at Southern works at prices named above for a term of years.

Also that payments for pyrites belong to and benefit the community we live in, whereas all calculations based upon the use of brimstone from foreign ports are subject to wide fluctuations, possible stoppage of supplies in case of war, and payments for the raw product and the freights are at all times to foreign owners.

In this connection it has already been said that the South is paying over \$1,000,000 annually to foreign owners for brimstone used in the manufacture of fertilizers, and a reiteration of this fact, with the data to bring the statements before the people generally, is for the purpose of increasing the output and demands for products of our soil, while decreasing the importation of foreign materials.

If we take the manufacture of acid phosphates as an example (sulphuric acid being used for no other purpose of consequence in the South) and present a business statement of the costs of same by use of brimstone and of pyrites, it will be found very interesting.

Manufacture of acid phosphate. Works with an output as stated above:

## BRIMSTONE PLANT IN ATLANTA, GA.

6,000 tons sulphuric acid, cost at \$7.65..... \$45,900  
6,000 tons phosphate rock, cost at \$8.00..... 48,000  
All treatment costs, etc..... 20,100

\$114,000

Product is 12,000 tons, therefore cost of one ton acid phosphate is \$9.50.

## PYRITES PLANT IN ATLANTA, GA.

6,000 tons sulphuric acid, cost at \$4.90..... \$29,400  
6,000 tons phosphate rock, cost at \$8.00..... 48,000  
All costs of treatment, etc..... 20,100

\$97,500

Product is 12,000 tons, therefore the cost of one ton of acid phosphate is \$8.22.

This would compare in a business way for one year's working as follows:

12,000 tons acid phosphate manufactured from brimstone, cost..... \$114,000

12,000 tons acid phosphate manufactured from pyrites, cost..... 97,500

Difference is added profit for use of pyrites \$16,500

Or, per ton of acid phosphate manufactured, \$1.34.

There is yet another side to this question of the utilization of the pyrites of the Southern States, and it is to this practice of the older countries we must look for the greatest good to the greatest number in our own country. It is a subject of general regret that we have not seen fit as yet to profit by the very striking examples of combined industrial plants which are to be seen in Europe, and nowhere in the United States is there the opportunity for their establishment on so favorable terms as in the middle part of the South.

The figures already given as to costs of manufacture of acids and acid phosphates must be sufficiently convincing as to the profitable side of the business, but it requires one more repetition of the statements made in my first article to illustrate any figures which will bring the benefits of old world workings into striking contrast with our own methods of to-day.

Suppose a case where one of the more prominent manufacturers of sulphuric acid, located at present along the seaboard, were educated in the utilization of all the products of such ores as are found in North Carolina, or the same character of ores as

are worked in large quantities in European metallurgical establishments.

The location of a works of this class would, of course, be determined by careful study of transportation problems, so that the carriage on raw materials, coal, phosphates, nitrogen compounds, potash, etc., and the transport of the finished fertilizers, acid phosphates, etc., would be favorable in all respects.

The manufacture of the acids in a scheme of this kind would therefore be expressed as follows:

COST OF SULPHURIC ACID PRODUCED AT THE MINE CENTERS.  
Ten tons pyrites, all costs of roasting, handling and preparing for the after treatment of contained metals, at \$1 per ton..... \$ 10 co  
Other costs, the same as given in former statement..... 38 25

Total cost ..... \$ 48 25  
Or on product of 16 tons chamber acid is \$3.02 per ton.

A year's business under such conditions would compare with the present methods as follows:

Production of brimstone plant for one year is 6,000 tons chamber acid, at cost of \$7.65..... \$49,500  
Production of pyrites plant at mines, one year, is 5,200 tons chamber acid, at cost of \$3.02, say..... \$15,700  
Difference is the profit by use of pyrites in the ordinary process of a metallurgical plant..... 33,800

Taking the utilization of the acid for manufacture of acid phosphate at the mines and we have the following result:

COST OF ACID PHOSPHATE AT MINE LOCATION.  
5,200 tons sulphuric acid, at \$3.02..... 15,700  
5,200 tons phosphate rock at \$7..... 36,400  
All costs of treatment..... 17,400  
\$69,500

Product is 10,400 tons, therefore, one ton acid phosphate costs \$6.68.

It must not be forgotten that the price of acid phosphate only four years ago was about \$25 per ton inland, and that during the past ten years it has been possible to manufacture this material, so essential to the welfare of the worn-out lands of the South, in Atlanta, and at not to exceed \$8 per ton.

The argument, in my first article, therefore, becomes apparent, and, in my judgment, it is only a question of time until such works are inaugurated in the South as will demonstrate these facts, and be the means of opening up industries which the enormous deposits along the mineral belt from Virginia to Alabama deserve.

THE Farmers' Alliance has a complete system for collecting and compiling crop statistics. Every sub-alliance has one member paid to attend to this business. Every county alliance has a similar official to whom all the subordinates report, and there is a State statistician, to whom all the county men must report. Higher than all is the national crop statistician, who furnishes the blanks and gives directions for the guidance of the rest. Here is a splendid machine, and if all its components are of the right kind, it ought to bring out thoroughly reliable information of great value to everybody.

THE English capitalists, whose large investments at Middlesborough, Kentucky, have been frequently mentioned, have recently shown their appreciation of the great executive ability of Mr. Alexander A. Arthur, manager of their company, by presenting him with the handsome sum of \$50,000, and by increasing his salary to \$25,000 annually. This is a substantial mark of appreciation, but no greater than the magnificent service Mr. Arthur has given his company deserved. It is reported that they also gave him carte blanche to follow out his own ideas in the establishment of mills and furnaces, promising him as many millions as were necessary to carry out his plans.

# STEADY PROGRESS.

## The South's Rapid Advancement.

### A Steady Increase in the Number of New Enterprises.

What the record of the industrial progress of the South will be on the first of next July or the first of next January it is impossible to foreknow. The advances of the past afford no sure rule for judging of what they will be in the future. Even geometrical progression has been surpassed by the wonderful growth of the South in all industrial lines during the past ten years. As the statistics of every three months have been tabulated in the MANUFACTURERS' RECORD, and their grand aggregates announced, many have thought that the highest possible results had been attained, and that the South would do remarkably well if it could but keep without impairment what it had gained. Even those most intimately acquainted with the South's diverse resources have been somewhat fearful that development was too rapid, that it was in danger of being overdone, and that there would come a time when the South would be compelled to pause for a breathing spell. Such was the common impression seven years ago; such it has continued to be after every subsequent quarterly report, and yet there has been no falling off, no let up whatever, but progress has been steadily cumulative, the impulse of all the preceding activity only adding to and accelerating that of the following three months.

Looking over the broad field of industry that is succinctly represented in the following tables, comparing the achievements of the last three months with those of any similar period during the past decade, remembering all that has been prepared by immense investments, amounting to many millions of dollars, to become productive and profitable in the near future, we can see no occasion for taking a pessimist view of the situation, but a multitude of reasons for believing that the South has but just crossed the threshold of development, and that for a long time to come the advances in all lines of industry will be such as to dwarf, by their greatness, all that the world now looks upon with amazement.

In referring to this subject in the quarterly report of one year ago we said: "The Southern boom presents features which have rarely been witnessed in the West's advancement. The West's development has been steady, continuous and largely the work of foreign additions to our population. The New South, or more properly speaking, the awakened South, is being built up by the enterprise of her own people and level-headed investors from other sections of the Union. More or less European capital is being put into Southern lands, forests, mines, mills and factories, but Europe's real part in the South's development has yet to be played. Well-informed foreigners are already pretty familiar with the South's merits as a field for investment and enterprise, but when this section comes to be as well advertised as the great West has been, Europe's surplus millions will need no urging to seek new homes in this, the most favored region of the new world."

What was thus said a year ago has been more than verified. The investments of foreign capital in the South have more than doubled in twelve months, and negotiations now pending with every prospect of a favorable conclusion, will greatly increase the already very large sum. While the South has scarcely been popularly advertised in Europe, yet what was done by the South Carolina

Department of Agriculture and by others in the shape of attractive exhibits at the recent World's Fair in Paris has aroused a spirit of inquiry and investigation among the better classes of foreign artisans and the well-to-do farmers, and has already brought over their representatives to examine the country and to find suitable locations for bodies of colonists. Among these people are skilled vine dressers, wine makers, silk cultivators, potters and persons of other useful trades and avocations, whose coming and permanent settlement would add materially to the diversity of Southern industries, while they would teach by example the practice of those domestic economics that obtain in the old world, but of which the South knows only by hearsay.

A comparison of the new enterprises organized or projected during the last three months, as compared with the corresponding time in 1889, 1888 and 1887, makes a most instructive exhibit:

	First three months of			
	1890.	1889.	1888.	1887.
Iron furnaces	24	19	3	17
Machine shops and foundries	57	41	36	31
Agricultural implem't factories	6	4	4	4
Flour mills	83	39	35	30
Cotton mills	25	33	32	15
Furniture factories	27	23	16	15
Gas works	8	6	10	15
Water works	32	25	26	15
Carriage and wagon factories	15	14	27	12
Electric-light companies	65	61	43	17
Mining and quarry enterprises	142	141	39	142
Wood-working factories, including saw and planing mills, sash and door factories, stave factories, &c.	235	325	253	189
Ice factories	60	31	17	35
Canning factories	16	40	103	22
Stove foundries	1	1	2	2
Brick works	77	52	35	43
Miscellaneous iron & steel works rolling mills, pipe works, &c.	26	13	2	19
Cotton compresses	9	5	7	9
Cotton-seed oil mills	7	16	6	4
Miscellaneous enterprises not included in foregoing	356	354	277	267
Total	1,294	1,259	1,075	923

It will be noticed that there was a very marked increase in nearly every important industry. Of furnace companies 24 were organized against 19 during the same period of last year and 3 during the same months of 1888, while of miscellaneous iron and steel works, such as rolling mills, pipe works, etc., there were 26, or more than double the number during the first quarter of 1888, and of machine shops and foundries there were 57, against 41 last year and 36 the year before. Thus while the South increases the number of its furnaces, it makes a still more rapid increase in the number of its miscellaneous iron enterprises that take the pig iron and turn it into the finished product. Of flour mills, furniture factories, ice factories, etc., there was also an increase; in wood-working enterprises there was a slight falling off.

In the following list we give the name, location and character of business of the new enterprises projected during the last three months, and existing establishments rebuilt (after being burned) or enlarged:

### ALABAMA.

LOCATION.	NAME.	BUSINESS.
Albertville, J. N. Collier	Saw Mill.	
Albertville, Mr. Joseph Carton	Planning Mill.	
Anniston	Rollstone Machine Co.	Machine Works.
Anniston	J. D. Foster	Planning Mill.
Anniston	Anniston Rolling Mill Co.	Rolling Mill.
Anniston	Cherokee Iron Co.	*Improved Bloomery.
Anniston	J. H. Gill	Foundry & Machine Sh'y.
Anniston	U. S. Rolling Stock Co.	New Rolling Mill.
Anniston	U. S. Rolling Stock Co.	Planning Mill.
Atalla, Mr. Nixon Bros.	Mining.	
Atalla	Atalla Lumber Co.	Planning Mill.
Atalla	Iron City Land & Imp. Co.	Furnaces, &c.
Atalla	J. H. Sligh	Saw Mill.
Atalla	E. owah Mining Co.	Iron Mining.
Ball Play	J. C. McDaniel	Saw Mill.
Bessemer	H. F. DeBardeleben & oth'r	Car Works.
Bessemer	Beggs & Bro.	+Brass Foundry.
Bessemer	Bessemer Tool Works	Tool Works.
Bessemer	P. B. Clark	Brick Works.
Beth	L. W. Brantley & Sons	Saw Mill.
Bexar	J. M. & W. M. Pearce	Saw Mill & Gin.
Birmingham	C. E. Shober and others	Brick Works.
Birmingham	B. B. Corner	*Flour Mill.
Birmingham	Birm. Hardw're & Mfg. Co.	Enlarged Tack Factory.
Birmingham	E. Tenn. & N. Ala. Coal	Increased Capital.
Birmingham	Anglo Birmingham Pot Co.	Add. Mining Machinery.
Birmingham	Sloss Iron & Steel Co.	Add. Mining Machinery.
Birmingham	B. B. Corner	*Flour Mill.
Birmingham	Mary Lee Coal & R. R. Co.	New Coal Mine.
Bluffton	S. H. Keller	Sash and Door Factory.
Bluffton	Bluffton Land, Ore & Rolling Mill.	
Bluffton	Furnace Co.	Brick-yards (2).
Bluffton	Furnace Co.	Handle Factory.
Brewton	Ala. Iron & Steel Co.	Repaired Furnace.
Brierfield	Morris G'ss Mining Co.	Mining.
Carrollton	A. W. & H. B. Latham	Gin.
Choccolocco	Pacific Brick Works	Enlarged Works.
Coaldale	Coaldale Brick & Tile Co.	Brick & Tile Works.
Corona	O'Brien Coal Co.	Increase Coal Mine.
Cullman	Parker Land & Coal Co.	Mining.
Decatur	H. S. Freeman	Saw Mill.
DuBois, Mr. Decatur Iron & Lum. Co.	Iron Mining.	
Ensley	Tenn. Coal, Iron & R. R. Co.	Repaired Furnace.
Ensley	Tenn. Coal, Iron & R. R. Co.	Coal Washing Machine.
Eufaula	W. E. Marcum	Ice Factory.

LOCATION.	NAME.	BUSINESS.
Florence	H. C. Rightmire	Knitting Mill.
Florence	Howeras & Meihoffer	Brick-yard.
Florence	Leftwich Lumber Co.	Increased Capital.
Florence	Fler, Grate & Mantel Wks.	Architectural Iron Wks.
Florence	Florence Wagon Co.	*Paint Mill.
Fort Payne	Frambes, Somers & Co.	Wood-working Factory.
Fort Payne	Lookout Basket Co.	Basket Factory.
Fort Payne	Bay State Furnace Co.	Furnace.
Gate City	Pioneer Glass Co.	Improved Works.
Gurley	Roberts & Johnson	Hoop Factory.
Hollins	Sample's Lumber Co.	Increased Capital.
Huntsville	Huntsville Fer. & Mil. Co.	Fertilizer Factory.
Ironaton	J. J. Hunter	Printing, &c.
Lane	Lane-Jackson Lumber	Mining, &c.
Lane	E. K. R. Co.	Printing, &c.
Linden	C. H. Allen	Planing and Grist Mill.
Lucerne	G. N. Buchanan	Lime Works.
Luvner	C. A. Cowart	Planing & Grist Mill.
Luvner	G. A. Buchanan	Saw Mill.
Madison X Rds	Donald Turner	Manufacturing, &c.
Mobile	Mobile Land & Cos. Co.	Dry Dock.
Mobile	Ollinger & Bruce	Saw Mill.
Mobile	Wager Lumber Co.	Fertilizer Factory.
Montgomery	A. D. Mills & Co.	Wood-working Factory.
Montgomery	Montgo'mry Brewing Co.	Enlarge Brewery & addl. Ice Factory.
Newcastle	Milner Coal & R. R. Co.	Add. Machinery.
New Decatur	Louisville & Nash. R. R. Co.	Brass Foundry.
Opelika	Penn & Co.	Ice Factory.
Opelika	J. L. & J. F. Renfro	Bottling Works.
Opelika	Opelika Elec. It. & Pow. Co.	Electric Light Works.
Orrville	Lovett & Rogers	*Grist Mill.
Piedmont	Cleburne Ochre Co.	Ochre Works.
Piedmont	Piedmont Land & Imp. Co.	Car-wheel Works.
Piedmont	Piedmont Land & Imp. Co.	Rolling Mill.
Piedmont	Piedmont Land & Imp. Co.	Water Works.
Piedmont	Piedmont Land & Imp. Co.	Electric Light Works.
Read's Mill	W. T. Farrar	Saw and Flour Mill.
Renfro	D. W. Rogers & Co.	Iron Furnace.
Rou'd Mount'n	Elliott Iron Co.	New Furnace.
Russelville	Alfred Parrish	*Electric Plant.
Selma	A. F. Wise	Cornice Factory.
Selma	Wise & Co.	Spoke & Handle Factory.
Sheffield	P. M. DeLeon and others	Quarrying.
Sheffield	Sheffield Machine Co.	Rolling Mill.
Sheffield	Sheffield Press Brick Wks.	Brick Works.
Sheffield	H. C. Rightmire	Knitting Mill.
Sheffield	Sheffield Engine, Boiler & Foundry Works	Machine Works.
Sheffield		Trunk Factory.
Sheffield	Ala. Furnace Supply Co.	Ore Mining.
Shelby	Shelby Iron Co.	Repaired Furnace.
Shelby	Alabama Coal & Iron Co.	Furnace.
St. Clair Co.	Broken Arrow Coal Co.	Mining.
Sulph'r Spgs.	T. F. Harrel	Saw Mill.
Sylacauga	Marble City Land & Furnace Co.	Furnace.
Talladega	Tal. Ice & Cold Stor. Co.	Remodel Plant.
Talladega	F. M. Howell	Gin, &c.
Talladega	Penn. Iron & Steel Co.	Furnace.
Thomas	Pioneer Min. & Manf. Co.	Add. Coke Ovens.
Troy	Asbury Harrison	Grist Mill.
Troy	Joseph Michener	Planing Mill & Sash Fac.
Troy	J. M. Langley & Co.	Water Works.
Troy	J. B. Wiley and others	Tannery.
Troy	Troy Water Works Co.	Water Works.
Troy	Henderson Knit. Mill	Increased Capital.
Tuscumbia	Tuscumbia E. Light Wks.	Enlarge Plant.
Tuskaloosa	H. H. Cribs	Enlarge Pottery.
Tuskaloosa	Tus. Cotton Compress Co.	Cotton Compress.
Woodstock	Edwards Iron Co.	Add. Machinery.

### ARKANSAS.

Arkadelphia, nr.		Saw Mills.
Batesville	J. M. Bartlett	Stone Quarry.
Bentonville	— Clingensmith	Cheese Factory.
Bentonville	Arkansas Tobacco Co.	Enlarge Factory.
Brinkley	Brinkley Lumber Co.	Lumber.
Conway	Donaghay & Slade	Furniture & Sash Fac'y.
Corning	Kline & Zollinger Lum. Co.	Saw Mill.
Eureka Spgs.	Mark Lisle	Brick-yard.
Fayetteville	Fayetteville Mercantile Co.	Milling.
Fort Smith	Fort Smith Canning and Wood-package Co.	Increased Capital.
Fulton	Frederick Reginold	Saw Mill.
Harrison	Ryan Bros. & Co.	Saw & Planing Mill.
Hope	J. L. Tullish	Printing.
Huntington		Cotton Mill.
Lead Hill	Lead Hill Min. & Smel. Co.	Manufacturing, &c.
Little Rock	Bert	Planing Mill.
Little Rock	Jas. Brodie	*Foundry.
Little Rock	Thomas Manf. Co.	Foundry & Mach. Shop.
Little Rock	Wilson Lumber Co.	Increased Capital.
May	Jackson & Lightfoot	*Stamp Mill.
Mt. Ida	Ark. Improvement Co.	Manufactures, &c.
Newport	Newport Ice Factory	Enlarge Factory.
Newport	Morrison & Decker Mf. Co.	Enlarge Stave Factory.
Newport	White River Ice Co.	Enlarge Ice Factory.
Okolona	J. L. Townsend	Tile Factory.
Pangburn	J. R. Coffey & Co.	Stave Factory.
Paragould	Brinkman Stave Co.	Ice Factory.
Pine Bluff	Ark. & Tex. Ice & Coal Co.	Saw & Planing Mill.
Pine Bluff	Rutherford & Clay	Shingle Mill.
Sincoe	G. H. Van Etten	Manufactures, &c.
Stuttgart	Stuttgart Improve. Co.	Printing, &c.
Texarkana	F. G. Wootten	
Van Buren	Van Buren Investment Co.	Manufactures, &c.
Whittener	Whittener & Singer	Flour Mill.
Wynne	Bearnard & Seaborn	Stave Factory.

### FLORIDA.

Arcadia	Peace River Phos. Co.	Machine Shop.
Blue Springs	Baldwin Phosphate Co.	Phosphate Mining.
Bartow		Fertilizer Factory.
Bridgeport	Davis & De Witt	*Shingle Mill.
Bronson	W. J. Epperson	Saw and Grist Mill.
Campbell	Camp Bros.	Saw Mill.
Charlotte Har.	Emerson, Hinckley & Tyler	Cigar Factory.
Charlotte Har.	F. Quednau	Cigar Factory.
Crescent City	L. P. Willis	Planing Mill.
Crescent City	A. B. Torrey	Saw and Planing Mill.
Drayton Island	Drayton Island Phos. Co.	Phosphate Mining.
Fernandina	Fla. Cen. & Pen. R. R. Co.	Machine Shops.
Fernandina	Glaiber	Saw Mill.
Fort Meade	Fort Meade Fert. Co.	Fertilizer Factory.
Gainesville	C. D. Schaefer & Co.	Quarrying.
Gainesville	B. L. Baldwin	Vinegar Factory.
Gainesville	Cooper Fur. & Lum. Co.	Furniture.
Gainesville		Phosphate Mining.
Gainesville	Gr. Co. Spgs. J. C. Beck, Jr.	Printing, &c.
Island Grove	Atlanta Perfumery Co.	Distillery.
Lakeland	M. Vineyard	Sugar Mill.
Leesburg	A. B. Eurd & others	Vinegar Factory.
Madison	Madison Phosphate Co.	Phosphate Works.
Mt. Pleasant	A. W. Snyder	Brick-yard.
Ocala	Albertus Vogt Phos. & Mining Co.	Phosphate Mining.
Ocala		Barrel Factory.
Ocala	Withlacoochee River Phos. Co.	Phosphate Mining.
Ocala	Mario Phosphate Co.	Phosphate Mining.
Ocala	Albertus Vogt Phos. & M. Co.	Phosphate Mining.
Ocala	W. T. Tompkins	Saw Mill.
Orlando	J. B. Parramore & others	Phosphate Mining.
Pa'atka	B. Seaver	Brick-yard.
Quincy	T. S. Ward & Co.	Brick-yard & Gin.
Sumterville	J. B. Towns and others	Fertilizer Works.
Tallahassee	Leon Lumber Co.	Enlarge Planing Mill.

## MANUFACTURERS' RECORD.

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9

## MISSISSIPPI.

LOCATION.	NAME.	BUSINESS.
Abeville	A. M. Graham & Bro.	Cotton Ginnery.
Aberdeen	Gibson-Moore Mfg. Co.	Spoke Factory.
Aberdeen	W. H. Boatner & Co.	Mattress Factory.
Aberdeen	Monroe Hedge Fence Co.	Fences.
Biloxi	N. Or. Shell Lime Mfg. Co.	*New Works.
Bogue Chitto	Tyler & Reed	Saw Mill.
Chatawa	A. L. Blac.	Saw Mill.
Cherry Creek	Nixon & Field	Grist Mill.
Clarkdale, nr.	Taylor, Strange & McClell.	Saw Mills.
Corinth	Alaba Fire-brick, Terra-cotta & Stoneware Co.	Chinaware, &c.
Cumberland	Cumberland Land, Lumber Imp. & Mfg. Co.	Manufactures, &c.
Friar's Point	Friar's Pt. Box & Wood-work Co.	Box Factory.
Glenalde	S. Strickland	Saw Mill.
Gloster	B. Well, Jr. & Bro.	Enlarge Saw Mill.
Greenville	Green, E. & Warehouse Co.	Grain Elevator.
Greenwood	Leflore Ice & Coal Co.	Ice Factory.
Greenwood	Ragsdale & Co.	Machine Shop.
Greenwood	F. B. Hull.	Brick Works.
Greenwood	Planters Comp. & Ware-house Co.	Increased Capital.
Grenada	Grenada Creamery, Cold Storage & Ice Co.	Cheese & Ice Factory.
Hancock Co.	E. J. Prentiss	Saw Mill.
Hattiesburg	Kamper & Lewin	Saw Mill.
Holy Springs	Chase & Wynn	Knitting Mill.
Jackson	P. W. Peeples & others	Fertilizer Factory.
Meridian	Meridian Fertilizer Fac'y	New Works.
Meridian	Meridian Pot'y & Mfg. Co.	Pottery.
Meridian	Love & Co.	Cone Mill.
Natchez	Natchez Gas Light Co.	Enlarged Electric Wks.
Netleton	C. H. Pond	Saw Mill.
Summit	Summit Mills.	Cotton Mill.
Vicksburg	C. C. Howard	Brick-yard.
Vicksburg	Jackson & Lubek	Brick-yard.
Vicksburg	W. H. Andrews & Bros	Saw Mill.
Vicksburg	Craig	Manufactures, &c.
West Point	West Point Mfg. Co.	Foundry & Mach. Shop.
Yazoo City		

## NORTH CAROLINA.

Addie	Botts & Garland	Saw Mill.
Ashboro	Gulford Lum. & Mfg. Co.	Sash & Door Factory.
Ashville	Ashville Lt. & Power Co.	Gas Works.
Ashville	W. H. Fitch & Co.	Sash & Door Factory.
Ashville	Ashville Ice & Coal Co.	Enlarge Ice Factory.
Ashville	Buncombe Brick & Tile Co.	Brick & Tile Works.
Ashville	Ashville Shoe Co.	*Shoe Factory.
Ashville	Ashville Brick & Tile Co.	Brick & Tile Works.
Ashville	C. E. Graham Mfg. Co.	Elarge Cotton Mill.
Ashville	Asheville Citizen Pub. Co.	Printing, &c.
Beam's Mills	Stroup & Abernethy	Flour Mill.
Burke County	Caroline Queen Gold Mine	Mining.
Burlington	G. W. Anthony	Saw & Planing Mill.
Burlington	J. H. & R. L. Holt	Cotton Mill.
Carthage	W. E. Black	Turpentine Distillery.
Castle Hayne	N. Carolina Phosphate Co.	Enlarged Factory.
Charlotte, nr.	A. G. Smith	Mining.
Charlotte, nr.	Boston Min. & Lumb. Co.	Mining.
Charlotte, nr.	A. G. Smith	Gold Mining.
Charlotte	H. H. Manning	Copper Stamp Factory.
Clinton	Stewart & Hines	Planing Mill.
Coleridge	Enterprise Mfg. Co.	*Cotton Ginnery.
Concord	J. L. Barnheart	Gold Mining.
Concord	Goodman & Co	Gold Mining.
Concord	W. A. Smith	Mining.
Davidson Col.	Linden Cotton Factory	Cotton Mill.
Dillsboro	Cummings & Buffin	Saw Mill.
Durham	Durham Med. Cigarette Co.	Cigarette Factory.
Durham	Wm. Anderson	Mattress Factory.
Edenton	Branning Mfg. Co.	Increased Capital.
Elliott	Randolph & Riddle	Saw Mill.
Estate	Litchfield & McCay	Wood-working Factory.
Egypt	Egypt Land & Mfg. Co.	Brick-yard.
Egypt	Egypt Coal Co.	New Coal Mines.
Fayetteville	Fayetteville Woodmen's Co.	En. Fac. & Add. Saw Mill
Fayetteville	John Roddick & Co.	Clothes Factory.
Flat Rock	Carolina Canning Co.	*Vinegar Factory.
Forest City, nr.		Distillery.
Franklin	H. G. Trotter	Saw Mill.
Goldsboro	Goldsboro Lumber Co.	Lumbering.
Goldsboro	Goldsboro Brick, Tile & Pottery Works	Enlarged Works.
Goldsboro	Wayne Agricultural Wks	*Foundry.
Graham	Thos. M. Holt	Flour Mill.
Greensboro	Greensboro Cotton Mills	Cotton Mill.
Greensboro	Crown Mills.	Cotton Mill.
Greensboro	S. A. Kerr	Ink Factory.
Greensboro	Greensboro Brick Co.	Brick Works.
Greensboro	Gulford Lum. & Mfg. Co.	Increased Capital.
Greensboro	J. H. Bernard	Saw Mill.
Henderson	J. L. Ludlow	Water Works.
Hickory	A. V. Sigmon	Planing Mill.
Hickory	Catawba Lumber Co.	Lumbering.
Hig Point	Gulford Furniture Co.	*Furniture Factory.
Hig Point	S. Perry	Spoke Factory.
Howard	Cashie & Chowan R. R.	*Saw Mills.
Jenkinstown	L. D. Wicker	Saw Mill.
Jonesboro	Gunter & Watson	Planing Mill.
Jonesborough	Watson & Gunter	Flour Mill.
Lenoir	Wilson Lumber Co.	Saw Mill.
Lemon Springs	G. McFadgen	Flour Mill.
Lexington	J. R. Plummer	Saw Mill.
Lexington	A. C. Wood & Bros.	Saw & Planing Mill.
Lincolnton	Watson & Cecil	Buck-yard.
Lincolnton	D. E. Rhynne & Co.	*Electric Plant.
Marshall	Elm Grove Cotton Mill.	Cotton Mill.
Maxton, nr.	Adams & Bros.	Saw Mill.
Mocksville	Brooks Bros.	Saw Mill.
Mooreville	Frank Brown	Saw and Planing Mill.
Morgantown		Quarrying.
Mt. Holly	Hockenberry & Mitchell	Saw Mill, Spoke & Han. Fac.
Nashville, nr.	W. A. Campbell	Gold Mining.
New Bern	Daniel Congdon & Son	*Planing Factory.
New Bern	New bn E.-it. & Power Co.	Electric Works.
Old Fort	Edward McDowell	Saw Mill.
Oxford	Graville Co. Farmer's Alliance Tob. Mfg. Co.	Double Capital.
Oxford	Kimbell Tob. Stemmer	Enlarged.
Pine Bluff	Pine Bluff Mfg. Co.	*Enlarge Saw Mill & Elec. Plant.
Raleigh	N. Carolina Wagon Co.	Increased Capital.
Raleigh	Raleigh Cotton Mills	Increased Capital.
Raleigh	Leath & Andrews	Ice Factory.
Randleman	C. C. Randleman	Enlarged Cotton Mill.
Rockingham	Williams & Wishart	Varnish.
Salisbury	J. A. Fisher	Canning Factory.
Sanford	W. H. Smith & Co	Quarrying.
Six Rana		Electric Light Works.
Southport	Southport Brick & Tile Co.	Brick & Tile Works.
St. Paul's	L. Shaw	*Grist Mill & Gin.
Tarboro	Wolf & Hall	Mining.
Tarboro	Tarboro Cotton Factory	Increased Capital.
Walkerville	N. D. Sullivan	Enlarged Tobacco Fac.
Washington	Geo. W. Kugler & Son	Saw & Planing Mill.
Washington	Brown & Sterling	Saw Mill.
Weldon	Raleigh W. P. & Nav. Co.	Develop Water Power.
Wilmingtn	J. H. Chadbourn & Co.	Saw Mill.
Wilmingtn	Industrial Mfg. Co.	Canning Factory.
Wilmingtn	Robert Portner Brew'g Co.	Cold Storage.
Wilmingtn	S. W. S. Kinner & Co.	Foundry & Mch. Works.
Winston	W. R. Leak and others	Tobacco Factory.
Winston	Win. E.-lt. & Steel Ry' Co.	Electric Plant.
Winston	R. J. Reynolds Tobac Co.	*Tobacco Factory.
Winston	Piedmont Land & Imp. Co.	

## SOUTH CAROLINA.

LOCATION.	NAME.	BUSINESS.
Anderson	Anderson Ice Co.	Enlarge Ice Factory.
Anderson	Sullivan Mfg. Co.	Sash & Door Factory.
Andersonville	J. H. Price	Saw Mill.
Atkins	Rankin & Bridgers	Planing Mill.
Barnwell	Enterprise Mfg. Co.	Grist Mill & Handle Fac.
Barnwell	Barnwell Oil & Fert. Co.	Cotton-seed Oil Mill & Fertilizer Factory.
Bennettsville	Ira Bounds	Factory.
Blacksburg	Blacksburg Printing Co.	Printing.
Blackville	Howard Bros.	Machin Shop.
Campbell's Bdg.		Saw Mill.
Carmichael	Campbell & Williamson	Grist Mill.
Charleston	Eureka Cotton Gin Co.	Cotton Gin Factory.
Charleston	Comus Fibre Co.	Fibre Mant.
Charleston	Geo. W. Rab, Jr. & Co.	Trunk Factory.
Charleston	Automatic Time Stock	Manufacturing.
Charleston	Feeder Co.	Manufacturing.
Charleston	R. M. & Edw. Anderson	Planing Mill.
Charleston	Santa R. Cyp. Lumb. Co.	Lumbering.
Charleston	Royal Bag Mfg. Co.	Enlarge Factory.
Chareraw	Cheraw Iron Works.	Increased Capital.
Chester	Berry Signal Lock & Tar get Co.	Manufactures.
Columbia	Palmetto Ice Co.	Ice Factory.
Columbia	Colmb. Kaolin & Imp. Co.	Pottery, &c.
Columbia, nr.	J. H. Counts	Lumber and Grist Mill.
Columbia, nr.	A. R. Stewart	Quarrying.
Crawfordsville	Harris & Dillard	Cotton Mill.
Easley	Bowen & Holcombe	Spoke & Handle Factory.
Easley	L. K. Kelly	Saw Mill.
Edgefield	Edgefield Ginnings, Mill- ing & Fert. Co.	Gill, Oil Mill & Fer. Fac.
Edgefield	Jones & Burpee	Carge & Wagon Fac'y.
Eutawville	Santeet, R. Cyp. & Lum. Co.	Lumber Mill.
Fairfield Co.	Fairfield Granite Co.	Quarrying.
Fairplay	O. L. McCurry, Pres't.	Plow Factory.
Florence	Florence Mfg. Co.	Sash & Door Factory.
Florence	Florence Tobacco Mfg. & Warehouse Co.	Tobacco Factory.
Florence	Flor. Brick & Tiling Co.	Brick-yard.
Florence	D. A. Layton	Enlarged Brick Works.
Georgetown	George's Barrel Mfg. Co.	Barrel Factory.
Georgetown	Palmetto Cypress Co.	Lumber & Shingle Mill.
Graniteville	W. A. Edwards	Knitting Factory.
Greenville	Greenville Fertilizer Co.	Fertilizer Factory.
Greenwood	Stephens & Oldham	Machine Shop.
Grindall	John W. Rison	Saw & Grist Mill.
Hampton	C. H. Mauldin & Son	Saw Mill.
Hartsville	Carolina Fibre Co.	Pulp Mill.
Hawthorn	A. J. Heath	Saw Mill.
Hickory Flat	D. K. Norris	Saw Mill.
Jefferson	Chesterfield Min'g, L'd	Mining.
Lancaster	Lancaster Mfg. Co.	Saw & Planing Mill.
Lancaster Co.	Dixie Gold Mine	Add. Machinery.
Langley	T. G. Lamar	Kaolin Mining.
Laurens	Lau. C. seed Oil & Fer. Co.	Increased Capital.
Laurens	Laurens Spoke & Handle Works	Sash & Handle Factory.
Lexington	Lexington Mfg. Co.	Cotton Mill.
Long Run	Fairfield Granite Co.	Mining & Quarrying.
Marion	Emerson McDufie	Brick Works.
Mt. Pleasant	Phoenix Spoke & Han. Co.	Spoke & Handle Factory.
Spartansburg	Spartans'g Cotton-seed	Cotton-seed Oil Mill & Fertilizer Factory.
Spartansburg	Morgan Co. Mfg. Co.	Brick-yard & Sash Fac.
Sumpter, nr.		Saw Mill.
Sumter	Edgar Skinner	Machine Shop.
Wimnsboro	S. Caro. Mining & Mfg. Co.	Mining, &c.

## TENNESSEE.

Anthony	D. R. Shores	Grist Mill.
Arlington	Warner Bros.	Saw Mill & Spoke Fac.
Athens	Jobling & Foutz	Brick Works.
Athens	Athens Woolen Mills.	Enlarge Mill.
Aurora	Blevins & McCree	Grist Mill.
Bluff City	Willey Boom & Lumber Co.	*Planing Mill.
Bon Air	Bon Air Coal & Coke Co.	*Increased Mining.
Bristol	J. W. Waynick	Bottling Works.
Bristol	Bristol Steel & Iron Co.	Improved Ice Factory.
Bristol	C. F. Camp	Enlarged Carriage Fac'y.
Burbank	G. Garland & Son	Saw Mill.
Caney Spring	W. J. Thomson	Saw Mill.
Carter's Creek	J. M. Hunter	*Flour Mill.
Carter's Depot	J. T. Wilder	Quarry.
Carter's Depot	C. F. Camp	Saw Mill.
Charleston	Morehead Bros.	Grist Mill.
Chattanooga	B. G. Willis	Saw Mill.
Chattanooga	Chattanooga Stave Wks	Stave Works.
Chattanooga	Sholz Bros.	*Fertilizer Factory.
Chattanooga	Chattanooga Sou. Mfg. Co.	Agricultural Imp. Fac'y.
Chattanooga	Chat Gas, Light & Fuel Co.	Improved Plant.
Chattanooga	Chattanooga F. & M. Wks.	Mac. Shop & Foundry.
Chattanooga	Cycloid Eng'g & St. P. Co.	Machine Works.
Chattanooga	Loomis & Hart Mfg. Co.	Enlarged Furn. Factory.
Chattanooga	Schofield Met'l Cross Tie Co.	Railroad Ties.
Chattanooga	Summit City Lt. & Imp. Co.	Planing Mill.
Chattanooga	Maxey & Overlock	Boiler Compound.
Chattanooga	E. J. W. Markley	Planing Mill.
Chattanooga	Queen & Crescent R. R.	Machine Shops.
Chattanooga	Reliance Milling Co.	Flour Mill.
Chattanooga	Mountain Spring Land Co.	Water Works.
Chattanooga	Truxal & Dunmeyer Ma chine Co.	*Foundry & Mach. Shop.
Clarksville	Clarksville Iron Co.	Furnace.
Clarksville	Union Bending Works	Wood-working Factory.
Clearmount	James Cate	Saw Mill.
Columbia	John Anton	Corn Mill.
Concord	Kellar Woods & Co.	Quarrying.
Cookeville	Terry & Slope	Saw Mill.
Cookeville	John Fadden	Grist Mill.
Corona	H. W. Stockley	Saw Mill.
Covington	Randall Bros. & Co.	Saw & Planing Mill.
Covington	Tenn. Coal, Iron & R. R. Co.	Repair Furnace.
Cowans	J. F. Simpson	Saw Mill.
Daylight	A. W. Stromberg	Furniture Factory.
Dee Lodge	Alexander Mansfield	Flour Mill.
Dunlap	Dyersburg W'r & Pow. Co.	Ice Factory.
Dyersburg	T. H. Sheppard	Electric Light Works.
Elizabeth	C. H. Lewis	Grist Mill.
Erwin	T. C. Blair, Roanoke, Va.	Iron Mining.
Fayetteville		Water Works.
Gallatin		Flour Mill.
Gatlinburg	John Chandler	Saw Mill.
Graysville	Jonathan Turrent	Grist Mill.
Goolitlesville	J. E. Scruggs	Saw Mill.
Greenville	Brown Mfg. Co.	Drug Factory.
Hanlan	Sylvester Brower	Grist Mill.
Harriman	Goodloe Bros.	Brick-yard.
Harriman	East Tenn. Land Co.	Electric Light Works.
Harriman	East Tenn. Land Co.	Water & Gas Works.
Harriman	G. W. Pearsons	Saw Mill.
Harriman	P. O. Keathley	Saw Mill.
Hillsdale	Jacob Ellers	Corn Mill.
Hill City	Long	Grist Mill.
Hornet	J. Rogers	Saw Mill.
Humboldt	Moseley & Overton	Stave Factory.
Iron City	M. L. Newman	Stave and Shingle Mill.
Iron City	Princeton Lime & Stone Co.	Quarrying.
Island Mills	F. M. & S. J. Roy	Saw & Grist Mill.
Jackson	Tenn. Ice & Cold Stor. Co.	Ice Factory.
Jellico	Southern Jellico Coal Co.	Coal Mining.
Johnson City	A. B. Bowman	Canning Factory.
Johnson City	Johnson City Tobacco Co.	Tobacco Factory.

## TEXAS.

Abilene	Totten	Planing Mill.
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## MANUFACTURERS' RECORD.

LOCATION.	NAME.	BUSINESS.	LOCATION.	NAME.	BUSINESS.	LOCATION.	NAME.	BUSINESS.
Fort Worth.	{ Fort Worth Candy & Cracker Co.	Enlarged Plant.	Buena Vista.	Forest Land Co.	Mining & Manufact'g.	Taylorstown.	J. S. House.	*Improved Flour Mill.
Fort Worth.	Ft. Worth Woolen Mfg. Co.	Woolen Mill.	Buena Vista.	Sitterding & Drever.	Saw & Planing Mill.	Tip Top.	Radford Brick Works Co.	Brick-yard.
Fort Worth.	{ Fort Worth Packing & Dressed Beef Co.	Packing Factory.	Buena Vista.	Waddy & Jordan.	Brick-yard.	Toledo.	Nitro Phosphate Co.	Mining, &c.
Fort Worth.	Ft. Worth Nursery, Seed & Canning Co.	Canning Factory.	Charlottesville F. J. Lilienfeld.	Bottling Works.	Charlottesville City.	Variety Shade.	Whisponny Co.	Mining, &c.
Fort Worth.	Lone Star Novelty Works.	Sash & Door Factory.	Charlottesville.	Soapstone.	Enlarge Gas Works.	Virginia.	Carnegie Iron Co.	
Fort Worth.	Texas & Pacific Rail'y Co.	Repair Shops.	Charlottesville.	Slate Co.	Quarrying.	Virginia.	Universal Dry'g & Can. Co.	
Fort Worth.	Texas Iron Rolling Mfg. Co.	Rolling Mill.	Christiansburg.	Va. Lime & Cement Co.	Enlarged Works.	Virginia.	Globe Refining Co.	
Fort Worth.	Ft. Worth Light & Pow'r Co.	New Works.	Clifton Forge.	Clifton Forge Electric.	Electric-light Works.	Virginia.	Lutner Coal & Iron Co.	
Fort Worth.	Turner Self-Lighting Cigar Co.	Cigar Factory.	Clinch River.	Light & Power Co.		Virginia.	Kentucky Coal Co.	
Fort Worth.	Lone Star Novelty Wks.	Sash & Door Factory.	Columbia.	Clinch Riv. Mineral Co.	Mining, &c.	Virginia.	Eureka Iron Co.	
Fort Worth.	Ft. Wth Granitic Roof Co.	Enlarged Factory.	Covington.	Fluvanna Milling Min.	Mining, &c.	Virginia.	Coal Mountain Mining Co.	
Fort Worth.	Ft. Worth Cement Co.	Cement Works.	Covington.	{ Potts Valley Min. & Mfg. Co.	Mining, &c.	Virginia.	Tug River Coal & Coke Co.	
Fort Worth.	Denver, Tex. & Fort Worth R. R. Co.	Machine Shops.	Covington.	Rish Patch Iron Co.	Mining, &c.	Virginia.	Carroll Iron Co.	
Fort Worth.	Ft. Worth Compress Co.	*Cotton Compress.	Covington.	E. M. Nettleton & others.	Mining, &c.	Virginia.	Virginia Princess Coal & Steel Co.	
Fort Worth.	Ft. Worth Nursery, Seed & Canning Co.	Canning Factory.	Covington.	Trowbridge Tobacco Co.	Tobacco Factory.	Virginia.	Amer. Fuel & Oil Gas Co.	
Fort Worth.	City.	Electric-light Works.	Danville.	Surry Lumber.	*Dry Kilns.	Virginia.	Southern Coal & Iron Co.	
Fort Worth.	Ft. Wth Builders' Sup. Co.	Wood-working.	Dendron.	Dunwiddie C. H. Petersburg Gran. Quar.	Quarrying.	Warm Springs.	M. H. McClintic.	Flour Mill.
Gainesville.	Brady Mill & Elevator Co.	Flour Mill.	Falmouth.	J. S. Buxton.	Grist Mill.	Warm Springs.	J. W. Bonner.	Grist Mill.
Galveston.	Galveston Land & Imp. Co.	Electric Light Plant.	Fincastle.	Rauch & Crush.	Wagon Factory.	Waynesboro.	Alexander Bros.	Furniture Factory.
Galveston.	Somenthal & Feist.	Vinegar Factory.	Glasgow.	Rappahannock Gold Mining Co.	*Gold Mining.	Waynesboro.	Lambert Bros.	*Sash & Door Factory.
Galveston.	Acme Vine & Pickle Wks.	Vinegar Factory.	Glasgow.	Glenwood Furnace Co.	Furnace.	Waynesboro.	R. J. Covens and others.	Planing Mill.
Greenville.	Brick-yard.	Brick-yard.	Glasgow.	L. C. Haden.	Saw Mill.	West Point.	J. S. Myers.	Brick-yard.
Harrisburg.	Coghlan Bros.	Brick-yard.	Glasgow.	W. D. Bethel & Co.	Brick Works.	West Point.	Artesian Ice Co.	Ice Factory.
Harrisburg.	Harrisburg Brick Works.	Brick-yard.	Glasgow.	Glasgow Manganese & Mineral Co.	Mining, &c.	Winchester.	E. Wilkinson & others.	Canning Factory.
Henderson.	Dawson & Arnold.	Brick & Tile Works.	Glasgow.	Glasgow Improvement Co.		Winchester.	Moore Bros.	Ice Factories.
Henrietta.	W. B. Worsham and others.	Ginney.	Glasgow.	Glasgow Mfg. Co.	Sash & Door Fact'ry.	Winchester.	Peale Coal & Iron Co.	Manufactures, &c.
Hillister.	Arthur Hutchins.	Saw Mill.	Glasgow.	Glasgow Improvement Co.		Wytheville.	A. P. Walker & others.	Ice Factory.
Hillsboro.	Hillsboro Roller Mill Co.	Flour Mill.	Glasgow.	Glasgow Improvement Co.		Wytheville.	Wytheville Develop't Co.	Manufactures, &c.
Hillsboro.	Hillsboro Roller Wheel Co.	Flour Mill.	Glasgow.	Glasgow Improvement Co.		Wytheville.	T. S. Blair & others.	Cotton Mill.
Houston.	Tex. Building & Mfg. Co.	Manufactures.	Glasgow.	Glasgow Improvement Co.				
Hubbard City.	Hub. Cy. Water Wks.	Water Works.	Glasgow.	Glasgow Improvement Co.				
Jefferson.	G. B. McDonald.	Flour Mill.	Glasgow.	Glasgow Mfg. Co.	Sash & Door Fact'ry.			
Kyle.	E. M. Crosthwaite.	Enlarged Ginney.	Glasgow.	Graham Land & Imp. Co.	Water Works.			
Kyle.	Beatty & Martin.	Grist Mill & Gin.	Glasgow.	H. Holt, President.	Panning Mill.			
Kyle.	Kyle Ginney & Mill Co.	Gin & Mill.	Glasgow.	Halifax C. H. Coal Mtn. tain Mining Co.	Mining, &c.			
Laredo.	Kankakee Woolen Mfg. Co.	Woolen Mill.	Glasgow.	Halifax Banister Furniture Co.	Furniture Factory.			
Laredo.	Laredo Coal Co.	Coal Mining.	Glasgow.	Halifax Plating Mill Co.	Panning Mill.			
Laredo.	Laredo Coal Co.	Woolen Mill.	Glasgow.	H. H. Halifax Plating Mill Co.	Panning Mill.			
Laredo.	Laredo Tannery & Leather Goods Co.	Tannery.	Glasgow.	I. Sa. Mill.				
Laredo.	Jacob Waymire.	Brick-yard.	Glasgow.	Flour Mill.				
Lewisville.	Bron Lewellen.	Lumber Mill.	Glasgow.	Basic S. Cell. Plant.				
Longview.	Lott Water Co.	Water Works.	Glasgow.	Electrical Supplies.				
Lott.	Water Works.	Electric-light Works.	Glasgow.	Enlarge Works.				
Marlin.	Thomas & Gorman.	Electric Mining Plant.	Glasgow.	Enlarge Works.				
Marfa.	Siera Blanca Min. & Ore Reduction Co.	Mining.	Glasgow.	Enlarge Works.				
Mallin.	E. Fairman.	Flour Mill.	Glasgow.	Enlarge Works.				
Marshall.	Mar. Canning & Evap. Co.	Canning Factory.	Glasgow.	Enlarge Works.				
McKinney.	McKinney Cot. Gin. Co.	Cotton Ginney.	Glasgow.	Enlarge Works.				
Mullin.	E. Fairman.	Flour Mill.	Glasgow.	Enlarge Works.				
Nacogdoches.	Nacogdoches Mfg. Co.	Manufactures.	Glasgow.	Enlarge Works.				
Paris.	Paris Mfg. Co.	Furniture Factory.	Glasgow.	Enlarge Works.				
Paris.	J. W. Rodgers & Co.	Furniture Factory.	Glasgow.	Enlarge Works.				
Pecos.	Pecos Land & Water Co.	Water Works.	Glasgow.	Enlarge Works.				
Quanah.	Odeil & McDonald.	Planing Mill.	Glasgow.	Enlarge Works.				
Quanah.	H. M. Maloy.	Wood-working Factory.	Glasgow.	Enlarge Works.				
Queen City.	Queen City Iron Mining & Smelting Co.	Furnace.	Glasgow.	Enlarge Works.				
Queen City.	E. J. M. Hopkins.	Ice Factory.	Glasgow.	Enlarge Works.				
Rusk.	San An. Water Wks. Co.	Enlarged Plant.	Glasgow.	Enlarge Works.				
San Angelo.	Maverick Printing House.	Enr. Plant & Elec. Plant.	Glasgow.	Enlarge Works.				
San Antonio.	San Antonio Tannery Co.	Tannery.	Glasgow.	Enlarge Works.				
San Antonio.	San Antonio Tannery Co.	Tannery.	Glasgow.	Enlarge Works.				
San Antonio.	S. W. Plemons & others.	Cot. Oil Mill & Compress.	Glasgow.	Enlarge Works.				
San Antonio.	Saltillo Electric Co.	Electric-light Works.	Glasgow.	Enlarge Works.				
Sipe Springs.	T. C. Vantis.	Ginney.	Glasgow.	Enlarge Works.				
Sulphur Spgs.	H. M. Maloy.	Wood-working Factory.	Glasgow.	Enlarge Works.				
Taylor.	J. R. Hoxie.	Cotton Compress.	Glasgow.	Enlarge Works.				
Taylor.	Missouri, Kansas & Texas Railroad Co.	Machin' Shops.	Glasgow.	Enlarge Works.				
Texarkana.	Interstate Lumber Co.	Lumbering.	Glasgow.	Enlarge Works.				
Texarkana.	Texark. Car Foundry.	Enlarged Works.	Glasgow.	Enlarge Works.				
Tyler.	Tyler Chair Factory.	Chair Factory.	Glasgow.	Enlarge Works.				
Tyler.	W. Williams.	Harness Factory.	Glasgow.	Enlarge Works.				
Tyler.	Lone Star Leather Co.	Manufactures.	Glasgow.	Enlarge Works.				
Vernon.	L. C. Heare and others.	Flour Mill.	Glasgow.	Enlarge Works.				
Vernon.	R. S. Kelley, Prest.	Electric-light Works.	Glasgow.	Enlarge Works.				
Waco.	Waco Medicine Co.	Grist Mills.	Glasgow.	Enlarge Works.				
Waco.	Waco Cotton Mfg. Co.	Cotton Mill.	Glasgow.	Enlarge Works.				
Waco.	Slayden & Kirksey Wool.	Increased Capital.	Glasgow.	Enlarge Works.				
Weimar.	Armstrong & Co.	Paint Factory.	Glasgow.	Enlarge Works.				
Wichita Falls.	McAllister & Co.	Brick-yard.	Glasgow.	Enlarge Works.				
<b>VIRGINIA.</b>								
Ada, near.	J. K. Rudisill.	Mining.	Glasgow.	Glasgow Improvement Co.				
Alexandria.	Carroll Aluminum Mfg. Co.	Aluminum.	Glasgow.	Glasgow Improvement Co.				
Alexandria.	Gray Medicine Co.	Medicine Factory.	Glasgow.	Glasgow Improvement Co.				
Alexandria.	Potomac Shoe Mfg. Co.	Shoe Factory.	Glasgow.	Glasgow Improvement Co.				
Alexandria.	Haskell Anti-Rattler Co.	Manufactures.	Glasgow.	Glasgow Improvement Co.				
Alexandria.	{ Mt. Carmel Mining & Protective Co.	Mining, &c.	Glasgow.	Glasgow Improvement Co.				
Alexandria.	Columbus Aluminum Co.	Aluminum.	Glasgow.	Glasgow Improvement Co.				
Alexandria.	U. S. Harness & Mfg. Co.	Harness Factory.	Glasgow.	Glasgow Improvement Co.				
Alexandria.	U. S. Gold Mining Co.	Mining, &c.	Glasgow.	Glasgow Improvement Co.				
Alexandria.	Miller & Roate.	Brick Works.	Glasgow.	Glasgow Improvement Co.				
Alexandria.	Blackman Gunright Co.	Manufactures.	Glasgow.	Glasgow Improvement Co.				
Alexandria.	Ondre & Kolk Engine.	Manufactures.	Glasgow.	Glasgow Improvement Co.				
Alexandria.	M. Mach & Mer. Co.	Manufactures.	Glasgow.	Glasgow Improvement Co.				
Amherst.	Va. State Mining Co.	State Mining.	Glasgow.	Glasgow Improvement Co.				
Amherst.	Amherst Mining & Mfg. Co.	Manufactures, &c.	Glasgow.	Glasgow Improvement Co.				
Bertha.	C. H. Amherst Mining & Mfg. Co.	Mining, &c.	Glasgow.	Glasgow Improvement Co.				
Basic City.	Basic City Mining, Mfg. & Land Co.	Furnace.	Glasgow.	Glasgow Improvement Co.				
Basic City.	Basic City Mining, Mfg. & Land Co.	Car Works.	Glasgow.	Glasgow Improvement Co.				
Basic City.	Basic City Mining, Mfg. & Land Co.	Planing Mill.	Glasgow.	Glasgow Improvement Co.				
Basic City.	R. M. Johnson.	Ice Factory.	Glasgow.	Glasgow Improvement Co.				
Basic City.	Quarles & Dinkle.	Brick-yard.	Glasgow.	Glasgow Improvement Co.				
Big Spgs. Dep't.	Big Spgs. Dep't.	Electric Plant.	Glasgow.	Glasgow Improvement Co.				
Big Spgs. Dep't.	Prof. J. R. Jones.	Quarry.	Glasgow.	Glasgow Improvement Co.				
Big Spgs. Dep't.	Big Spring Co.	Mining, &c.	Glasgow.	Glasgow Improvement Co.				
Big Spgs. Dep't.	Big Stone Gap Develop. Co.	Manufactures, &c.	Glasgow.	Glasgow Improvement Co.				
Big Spgs. Dep't.	Foundry & Mach. Shop.	Foundry & Mach. Shop.	Glasgow.	Glasgow Improvement Co.				
Big Stone Gap.	Big Stone Gap Water Co.	Water Works.	Glasgow.	Glasgow Improvement Co.				
Big Stone Gap.	Big Stone Gap Imp. Co.	Furniture Factory.	Glasgow.	Glasgow Improvement Co.				
Big Stone Gap.	Big Stone Gap Imp. Co.	Chemical Factory.	Glasgow.	Glasgow Improvement Co.				
Big Stone Gap.	Big Stone Gap Imp. Co.	Furnace.	Glasgow.	Glasgow Improvement Co.				
Big Stone Gap.	Big Stone Gap Imp. Co.	Pulp Mill.	Glasgow.	Glasgow Improvement Co.				
Big Stone Gap.	Big Stone Gap Imp. Co.	Planing Mill.	Glasgow.	Glasgow Improvement Co.				
Big Stone Gap.	Big Stone Gap Imp. Co.	Brick-yard.	Glasgow.	Glasgow Improvement Co.				
Big St'ne Gap.	Big Stone Gap Electric.	Electric-light Works.	Glasgow.	Glasgow Improvement Co.				
Blackstone.	Freeman Epes.	Flour Mill.	Glasgow.	Glasgow Improvement Co.				
Blackstone.	A. W. Baldwin.	Saw Mill.	Glasgow.	Glasgow Improvement Co.				
Blackstone.	W. H. Ballard & D. I. Butler.	Grist Mill.	Glasgow.	Glasgow Improvement Co.				
Black Walnut.	C. M. Jordan & others.	Canning Factory.	Glasgow.	Glasgow Improvement Co.				
Brentville.	Brook Neal.	Quarrying.	Glasgow.	Glasgow Improvement Co.				
Brook Neal.	Bruce & Co.	Mining.	Glasgow.	Glasgow Improvement Co.				
Brook Neal.	Brook Neal Min. & Imp. Co.	Mining, &c.	Glasgow.	Glasgow Improvement Co.				
Buchanan Co.	Big Ax Coal, Coke & Ir. Co.	Mining, &c.	Glasgow.	Glasgow Improvement Co.				
Buena Vista.	Buena Vista Fence Co.	Fence Factory.	Glasgow.	Glasgow Improvement Co.				
Buena Vista.	Wise Wagons Works.	Wagon Factory.	Glasgow.	Glasgow Improvement Co.				
Buena Vista.	Timberlake & Maslin.	Woolen Mill.	Glasgow.	Glasgow Improvement Co.				
<b>WEST VIRGINIA.</b>								
Taylorstown.	J. S. House.	*Improved Flour Mill.	Charleston.	Pardee & Curtin Lumb.	Gas & Electric Works.	Elkins.	Lumber Co.	Box Factory.
Taylorstown.	Radford Brick Works Co.	Brick-yard.	Charleston.	Light Co.		Elkhorn.	Lick Brach Coal & Coke Co.	Add. Coke Ovens.
Taylorstown.	Nitro Phosphate Co.	Mining, &c.	Charleston.	W. H. Bonner.		Fairmont.	Building Co.	
Taylorstown.	Variety Shade.	Whisponny Co.	Charleston.	J. H. Millender Lumb.	Electric Plant.	Freemont.	Building Co.	
Taylorstown.	Virginia Coal & Iron Co.	Mining.	Charleston.	Roy Furniture Co.		Gardner.	Saw Mill.	
Taylorstown.	W. H. Holt.	Plaster Co.	Charleston.	Vickers Wagon Works Co.	Wagon Factory.	Gardner.	Charleston Ice & Ref. Co.	Ice Factory.
Taylorstown.	W. H. Holt.	Charleston Ice & Ref. Co.	Charleston.	Charleston Ice & Ref. Co.	Ice Factory.	Gardner.	Charleston Ice & Ref. Co.	Ice Factory.
Taylorstown.	W. H. Holt.	Charleston Ice & Ref. Co.	Charleston.	Charleston Ice & Ref. Co.	Ice Factory.	Gardner.	Charleston Ice & Ref. Co.	Ice Factory.
Taylorstown.	W. H. Holt.	Charleston Ice & Ref. Co.	Charleston.	Charleston Ice & Ref. Co.	Ice Factory.	Gardner.	Charleston Ice & Ref. Co.	Ice Factory.
Taylorstown								

## The Cotton-Seed Oil Discussion.

IHERIA OIL MILLS,  
NEW IHERIA, LA., March 17, 1890.  
Editor Manufacturers' Record:

Please accept our thanks for taking up cudgels for cotton-seed oil. We approve of the aggressive policy and believe there is good ground to fight on. We all know that hog cholera and other diseases are always more or less prevalent throughout the hog-raising sections.

I stood in a packing or slaughter-house in Cincinnati and saw a dead hog come in which was converted into lard. I enquired of one of the manipulators what the hog died of. His answer was that he did not know and did not care; that his business was to make the lard, not to investigate the cause of the hog's death. After fully satisfying myself, I came to the conclusion that the use of lard branded "refined lard" was anything but wholesome; that it was a villainous and unhealthy article, and dangerous as food. The witnesses who were examined by the Congressional investigating committee fully justified me in this conclusion. They all stated that lard was made from hogs bought, it made no difference whether they were taken from the cars dead or live. They intimated that there was so much money in each hog, and that, dead or alive, they must be made to yield a profit. So that dead hogs, no matter what the cause of death, must go through the mill "all the same." I refer you to the testimony of these slaughter and packing-house witnesses taken by the committee and published at the time, to corroborate the above statement. Then the question came up—What can we substitute for this vile article of food?

It has long been known that the Italians, Greeks and other peoples across the water use large quantities of oil for culinary purposes; that olive and other vegetable oils are exceedingly pure, clean and healthy. Our attention was thus called to cotton-seed oil. We know that good oil cannot be made of spoiled or bad seed; that it is too cheap to be adulterated; that it contains all the essentials of a healthy, fattening and strengthening food. We determined to try it, and the result has been most satisfactory. There was at first some prejudice among cotton growers to using the oil extracted from the heretofore despised cotton-seed, but stubborn facts, with a growing appreciation of the virtues of the oil, and a knowledge of how to use it, overcame this, and to-day in this section more cotton seed oil than lard is used. In these times of close calculations and small margins, economy is an important consideration, particularly to wage-earners, and among them your paper finds its greatest number of readers.

Now I speak from practical experience when I state that two-thirds of a gallon of cotton-seed oil will go as far and contain as much nutriment as one gallon of the lard which we used to buy of our grocer. Since my visit to the Cincinnati slaughterhouse I have not used an ounce of lard bought at the grocery stores. Well refined cotton-seed oil, made of sound seed, I find much more economical, and I know it to be much cleaner and more healthy. The best of summer yellow cotton-seed oil can be bought in New York to-day for 35 cents a gallon, say 40 cents. Lard costs 8 cents a pound, or about 95 cents per gallon. Two-thirds of a gallon of oil will do the work of one gallon of lard. So your readers can figure on that and draw their own conclusions.

Italy put an almost if not quite prohibitory duty on cotton-seed oil to protect her olive industry, and now the United States is considering the question of a tax on it to protect her lard manufacturers. Why not put a tax on Tennessee iron to protect Pennsylvania iron? Or, why not tax

everything south of Mason and Dixon's line to protect everything north of that line? Is revenue the object? Then let sugar alone and keep your hands out of the treasury, and we shall have more than enough to pay all expenses, including Corporal Tanner's idea. FRED GATES.

TRENTON COTTON-SEED OIL MILLS,  
TRENTON, TENN., March 18, 1890.  
Editor Manufacturers' Record:

In regard to the use of cotton-seed oil in place of lard, would say my experience is decidedly in favor of cotton-seed oil. Some of the best biscuits I have ever eaten were made up with cotton-seed oil. Some persons declare they can detect cotton-seed oil when used in biscuits. I had a test case at my house. A young lady was boarding with me and she thought she could always detect cotton-seed oil when used in cooking. I made a wager with her and directed the cook to alternate with lard and cotton-seed oil in making up biscuits for a week. Every day I would ask her about the biscuits. Whenever the biscuits were unusually nice she would say they were made of lard and vice versa, while in fact on every occasion she was declaring favorably to cotton-seed oil against lard. At the end of the week she was thoroughly convinced, not only that she could not tell the difference, but that cotton-seed oil made better bread than hog's lard. My experience is that it is wholesome food, and the reason that cotton-seed oil is not used more than it is on account of prejudice. W. L. ELDER.

SOUTHERN COTTON OIL CO.,  
MEMPHIS, TENN., March 17, 1890.  
Editor Manufacturers' Record:

I have your esteemed favor of the 14th in reference to cotton-seed oil as an article of food, and also a copy of your paper, for which accept our thanks. There is no doubt, in the writer's mind, that if cotton-seed oil is properly refined and properly used it could be made to take the place of lard to a large extent, and it would be much more economical as to cost, and we believe it would be healthier to the consumers. Not many years ago cotton-seed oil was used very extensively in this city as a substitute for lard. Many of our wholesale grocers carried large stocks of it, the same as they do lard, but unfortunately some of the refiners here ruined the trade by putting up an oil that was not fit for cooking purposes, being made from inferior seed. It has come under the writer's observation that if the salt that is to be used in the batter is put in the oil itself before it is mixed in, it takes away the unpleasant odor attending cotton-seed oil, which has been a source of objection to its use. One of our largest retail grocers here tells the writer that he thinks the cooking oil should have the stearine removed. This is done by a freezing process, pressing out the oil, giving what is known as winter oil. It is claimed by many people that cotton-seed oil is an anti-dyspeptic. The writer knows several people who claim to have been permanently cured of dyspepsia by using cotton-seed oil instead of lard.

ALSTON BOYD.

DEMOPOLIS, ALA., March 19, 1890.  
Editor Manufacturers' Record:

Referring to yours of 13th would reply that the bill or bills now before Congress in regard to cotton-seed oil would be a death blow to one of our greatest industries, and one that is of vast benefit to more of our people than any other we have. Every white man, woman and child, as well as, or rather more particularly, I should say, our colored people, is directly interested in it. I say negro more particularly, from the fact that he has that part (the seed) of his crop free of all lint, to do as he pleases with, and gets the cash for them readily, and that little cash he gets he prizes far more highly than he does the balance of his crop. He gets one-third, one-half or

all the seed from the cotton, according to the way he works, for one-third interest in crop, for one-half interest, or as he rents, respectively. He takes up more than he makes during the year, and although at the end of the year he is heavily in debt, by general consent he has his cotton-seed to do as he wishes with. So you may truthfully say the time has arrived when cotton is raised for the seed, as far as our negro is concerned at any rate.

There can be no honest, well-founded objection to pure cotton-seed oil, and I sincerely hope no bill will be passed at all against its use in any form.

Cotton seed was rather a nuisance on the farm before the establishment of oil mills. Seed in small lots only found any sale at all, and then at 5 or 6 cents per bushel for cow feed in the towns. The prices for them have ruled from 8 to 30 cents per bushel since the establishment of these mills, and now millions of bushels find their way to market at from 15 to 20 cents per bushel, the ruling prices to-day in this and many other markets. The meal from them form the basis for the very best fertilizers known or used in this cotton-growing country, and most of it finds its way back to the soil and assists in the greatest degree to increase the yield of all our farm products.

Too much cannot be said for the oil industry in the South, and great loss to both white and black laborers on the farms must come from any unfriendly legislation towards it, and I believe the pending bills if passed will kill this great enterprise.

JNO. C. WEBB.

### An Agricultural Sub-Treasury.

The Vance bill for the establishment of a warehouse system for the benefit of agriculturists is designed to create an agricultural sub treasury. The Farmers' Alliance and Industrial Union has adopted that scheme, and can bring more than a million votes to its support. This "inconvenient multitude" (we borrow a phrase invented by the New York Herald) wants something, wants it very much, indeed, and is determined to have it. That something is ready relief from financial trouble. Many of the leaders in this movement are able and influential men, the peers intellectually, morally and socially of any equal number of men in public life. Behind them are newspapers of considerable circulation and influence that are discussing the question every week and making scores of converts. Such being the situation, it is the part of wisdom to recognize it, and, studying the subject in every light, to learn whether the first causes of complaint actually exist; if so, what ought to be done to remove them, and that right way once known, then to lose no time in getting into it.

The MANUFACTURERS' RECORD procured a number of copies of the sub-treasury bill and mailed them to various parties, who were requested to read the measure carefully and to give their views for publication. The gentlemen are all men of eminence, some of them filling high political positions, but the majority engaged in important business enterprises. Some of the replies we publish in this issue, and bespeak for them that careful reading which the importance of the subject and the high standing of their writers merit.

TENNESSEE MANUFACTURING CO.,  
NASHVILLE, TENN., March 14, 1890.  
Editor Manufacturers' Record:

Your letter of the 11th inst. received to-day with the printed matter enclosed as

stated. I really do not care to give expression to my views as to this measure for public ventilation, for my opinions are not sufficiently noteworthy to have a following; but, on the other hand, I do not care to treat your courteous letter with less of courtesy than you manifest.

I fail to find anything to commend in this measure. It proposes to constitute the government and its officials as meddlers in the private business of the citizens. If it is to become a function of the government to do this thing I can see no just limitation, and no good reason can be shown why it is not the duty of the government to foster the interests of every citizen in whatsoever business he may be engaged. This is the legitimate progeny of the pernicious principle of protection, and if followed to the end, with the present tendency of the times, will convert the whole business of the country into a vast government shop—officered by government officials, honeycombed with venality and fraud, a huge machine of corruption, both of private character and public administration. The question of suffrage, almost a mockery now, will soon be a by-word and a reproach with these government agents abroad throughout the land, with the means of controlling the elections and the votes of the people.

Government warehouses will soon become political machines to carry out the behests of some party machine boss. This country is rapidly drifting away from the landmarks of the government inaugurated by Washington and Jefferson, and nothing appears more alarming than this effort to render more paternal this already very paternal government of ours.

GEORGE M. GOODWIN.

GRANITE COTTON MILLS,  
HAW RIVER, N. C., March 18, 1890.  
Editor Manufacturers' Record:

I am in my office to-day, but not able to attend to any business; am quite feeble from a very severe attack of la grippe. I find on my desk yours of the 11th, with copy of the bill alluded to. It is a very important matter, so much so that I prefer not to attempt an opinion on it, feeling as feeble as I do. Agriculture seems to be in a bad fix, and if anything could be done to relieve it I would be glad to see it. I have some \$40,000 invested in farming myself, and I feel the effects of low prices for farm products. I think Congress will give the bill due consideration, as it is an important matter, and the farmers seem to think something can be done for them.

THOS. M. HOLT.

ATLANTA COTTON MILLS,  
ATLANTA, GA., March 13, 1890.  
Editor Manufacturers' Record:

In reply to your letter of the 11th, I would say that I am in favor of the legislation asked for by the Farmers' Alliance, of course surrounded by such safeguards as a full discussion in Congress may suggest. I want as full and complete protection for agriculture as for manufactures, and especially for our rice, fruit and sugar against foreign cheap labor.

No man can sustain a policy which gives a government market for silver, a government storage protection for whiskey, and deny what is asked in behalf of imperishable agricultural products. I also favor government advances under proper safeguards, on the value of farm lands under cultivation at low rates of interest.

There need be no fear of "socialism" or "paternalism" in any of these measures by the national government, after our experience since the foundation of this government, in paying from the public funds for the deficit in serving the whole people with the best possible mail service at low rates of postage.

The same principle we have established in the case of the mails will apply to whatever Congress deems best for the whole people, and nothing will sooner firmly es-

tablish a national sentiment throughout the whole country than this tangible evidence that national wealth and power will be used to build up the interests of all the people who constitute the nation.

RUFUS B. BULLOCK.

THE AMERICAN PROTECTIVE TARIFF LEAGUE,  
No. 23 WEST TWENTY-THIRD STREET,  
NEW YORK, March 15, 1890.  
*Editor Manufacturers' Record.*

I have your favor of the 11th with enclosed slip relating to the bill introduced by Hon. Z. B. Vance in the United States Senate on the 24th of February.

There are, it seems to me, various reasons why those who are familiar with the great markets of the country and the methods of selling crops, and who know how prices are determined and what raises and depresses them, would condemn the measure as impracticable. No one would go farther than myself to relieve the agricultural interests of the country, or to remove any obstacles which interfere with their prosperity. But this scheme would only hold out a delusion which would in the end, and in a very short time, if put in operation, result in unmitigated disaster.

Agricultural products are too bulky to be stored and kept, and most of them of a character that require to be sold without delay, or in the season of their production, to avoid loss by decay. They must also be sold in the season of their production to make way for the crops of the ensuing year. No greater misfortunes have ever befallen our farmers than those which have followed the withdrawal from the market of the crops of one year, until the crops of the following year had been brought forward to double the volume of farm supplies in the market.

If our farmers desire to accumulate the value of their productions in government warehouses, the better way by far would be to sell their produce and turn the proceeds into silver, and then deposit the silver to represent those proceeds. I say this would be the better way, but I know that this also is impracticable; that when the farmer sells his crop, he, like all others engaged in the industrial pursuits of this country, wishes to use the proceeds either in payment of his debts, or in the sustenance of those who are dependent upon him.

The article which you enclose contains reasons given by Col. Skinner and others, why some such scheme might be adopted; but these reasons have serious defects which invalidate them, and go far to show that the gentlemen who propose these schemes and offer these reasons, cannot be well informed of the conditions which govern either the prices or the methods of disposing of our great crops.

It assumes, in the first place, that the prices of our commodities are fixed in what it calls the markets of the world before the crops are garnered. If they would reflect further, they would see that the prices are not fixed in any special market, or by any individual, but by conditions which have become known respecting the amount and character of the crops and the extent of the demand for them. Our own people virtually determine what prices they will receive for their products. If they produce more than the American markets can consume, and thereby compel themselves to compete with the productions of countries where labor receives but an insignificant reward as compared with that which it receives in the United States, they have practically predetermined that they will sell at correspondingly low prices. They have themselves fixed the market price, because they have themselves fixed the conditions which determine the price.

This is particularly true as regards cotton; for the United States has practically a monopoly in the production of cotton.

Its price depends absolutely upon the volume of the American crop and its conditions. The prospect of a crop of six millions of bales, if so reported from our agricultural bureau, would result in an enhancement of prices far beyond anything we have known since the Civil War. A crop of eight millions of bales, on the other hand, would soon depress prices far below any prices which we have known since the late Civil War.

The market price of this commodity is not at all determined by the foreign competition of cotton produced in other parts of the world. It is exclusively determined by ourselves in our own cotton fields; and if we are not satisfied with it we have only ourselves to condemn.

That these assertions are substantially true, and true in the long run, may be easily demonstrated by those who desire to investigate the facts.

It will also be found as regards all our important staple productions which have a market in Europe, that prices in this country have not been regulated by the movement of prices on the other side of the ocean. The buyers and sellers on both sides watch the tendencies of condition, production and demand to which I have above referred and act accordingly, independently of each other, and often with opposite conclusions.

Those economists who think the small quantity of wheat or corn we send to Liverpool is the ultimate cause which fixes the price of the entire crop consumed in this country, are not unlike the weather-monger who should imagine that the vane on the church steeple controls the wind.

The value of our crops under ordinary conditions in other parts of the world will be found to vary inversely, quite uniformly, with the volume of production. The corn crop is a good illustration:

Year.	Quantity—Bush.	Value.
1883	1,551,066,845	\$658,051,485
1884	1,795,528,432	640,735,869
1885	1,936,176,000	635,674,630

The larger the production the lower the price; and the same will, under regular conditions, be found true of all our great commodities.

An interesting illustration of the fact that prices of our exportable commodities are determined by home conditions will be found in the statistics of our exports of cotton goods. They amounted in 1860 to about \$10,000,000. The home market was depressed, and an outlet was found for a quantity of cotton goods greater than ever before. Since that time the volume of exports has varied uniformly but inversely with the prosperity of the home industry. Prices have been fixed in this country, and only when the conditions which determine them were such as to reduce prices to the foreign level have our exports been enlarged. A favorable change of conditions has uniformly reduced exports again, and after 30 years of varying results our exports of cotton goods stand in 1889 where they did in 1860.

It seems to be assumed by the friends of this measure that manufacturers are protected, respecting the prices of their productions, by the government, and that this is one of the reasons why the government should undertake to protect the prices of agricultural products. Herein lies a great error. The government does not protect the prices of manufactured products. It simply raises a barrier respecting some of them against unfair and unjust foreign competition. Prices are determined by competition at home. Protective legislation aims to limit competition to that which naturally rises among ourselves.

It does precisely the same thing as regards agricultural products, and, when protection is adequate, the products of both manufacture and agriculture have their prices determined from season to season by the aggregate condition of supply and demand at home, one as fully as the other.

It is generally known that at the present time many kinds of manufactured articles cannot be sold at cost. The remedy is in a reduction in the quantity produced or an increase of the demand.

The same rule applies to agricultural products. At the present time a great variety of the articles produced on farms cannot be sold at remunerative rates. The prices prevailing in Europe have not occasioned this. These prices are mainly determined by conditions prevailing here. If our farmers would raise the prices of their productions, there are, as in the case of manufacturers, only two ways to accomplish it—first, to reduce production, or second, to increase consumption, or both at the same time.

To illustrate the fact that while protection alone permits the existence of many of our industries, neither protection nor free trade exclusively determines prices or profits, and that both prices and profits are ultimately regulated by conditions of production and demand, it is well to point to the actual condition of four of our leading industries: Cotton planting—Unprotected, prosperous, crop good, demand large. Anthracite coal mining—Unprotected, disastrous, production large, demand small. Iron manufactures—Protected, prosperous, production large, demand large. Wool manufacturers—Protected, disastrous, production large, demand small.

Cotton and anthracite coal have no foreign competition in the home market; demand and supply are determined here. Iron manufactures have almost the entire home demand, secured by legislation and high prices abroad. Wool manufacturers are exposed to foreign competitors, who furnish more than one-fourth of all the woolens consumed in the United States, and diminish to that extent the demand for our own productions.

In each instance the ultimate factor which regulates profits and prices is the relation of demand and supply, though in the two last legislation and foreign competition largely affect or control the supply.

Should the government undertake to accumulate farm productions in its great warehouses, it would only aggravate the conditions of things which prevail at the present time. By keeping in sight of the consumer and of those who purchase farm commodities the volume of the supply as compared with the extent of the demand, the buyers would use this information in negotiating with the farmer to depress prices.

The conditions attending the storage of silver, which seems to have suggested the scheme referred to, are entirely different. Silver is an imperishable product. Its production does not vary essentially from year to year, and cannot be stimulated materially by special demands. Its production depends upon accident, and very little upon the will of men. It is, therefore, a comparatively staple production. The demand for it is regular, and nearly in proportion to the production. Although in the last quarter of a century the price of silver to-day, as measured in gold, is reckoned to have depreciated, there are substantial reasons for believing that the price of silver to-day, as measured by the prices of the great staple commodities, has not materially declined. On the other hand, it is very clear, if this is true, that it is the price of gold that has appreciated in consequence of its rapidly diminishing production, and the increased demand following the demonetization of silver in Europe.

It seems to me, therefore, that there is no more staple commodity in the world than silver, and that the plan which has been suggested and partially adopted by this government to make silver the basis for our national currency, is one of the best that could possibly be adopted, and would solve a problem that has vexed our legislators for many years, namely, how to

furnish an adequate supply of currency for our rapidly increasing population and trade.

The essential reasons for making silver the basis of the national currency are peculiar, and do not apply to either agricultural products or manufactured products. There is no ground for a comparison between them.

I earnestly favor the proposal to increase the deposits of silver in the form of bullion, and the issue of a uniform national currency based upon it. The sooner this is done, in my opinion, the sooner will the whole country, and especially our farmers, be relieved from one cause of depression which now prevails not only among them, but among all other classes of producers, namely, a deficiency of the circulating medium.

The volume of currency in the United States has not expanded in recent years as rapidly as population and trade. The volume per capita is decreasing. This is manifest in all the great centers of business, as well as in statistical reports, and our legislators cannot too soon take note of it, and do what lies within their power to remedy it.

EDWARD H. AMMIDOWN, Pres.

[Spec. corresp'dence MANUFACTURERS' RECORD.]  
CHATTANOOGA, TENN., March 12, 1890.

The past two weeks has developed considerable change in the prices of iron. It is very difficult, however, to fix prices now, but the change has been at least \$2.50 per ton. The market is quite demoralized, but it has resulted in very large quantities changing hands at prices all the way ranging from \$13.50 to \$14.00 for No. 1 at the furnaces. One large sale—15,000 tons—of No. 3 was made at \$12.50 at the furnace, which, with commission off, netted the furnace \$12.25. As these prices are very near bed rock, it is difficult to conceive how figures can go much lower, considering the fact that since last summer when prices were so low the expenses of making iron have advanced very much, and most people who consider themselves as competent to judge are of the opinion that as soon as the flurry is over that prices will settle down to about \$13.50@\$14.00 for No. 1 at the furnaces.

A great deal has been said about the unavailability of our Southern ores for making steel, but there are now some very important movements being made that will undoubtedly develop a successful era in the South in making steel.

Some time ago the South Tredegar Iron Works, of this city, commenced the work of manufacturing soft steel from a very high grade of phosphoretic iron, and to-day they are turning out about 40 tons of as fine a grade of soft steel as there is made in the United States, and it cannot possibly be considered in any other light than as a complete success and, what is more, the actual cost of converting the pig into the finished bar or billet is only about two-thirds the cost of puddling.

The Southern Iron Co. have just commenced operations on a very large scale with a view to manufacturing steel exclusively. It is the intention to get the works in operation during the present summer.

In addition to these works there are now in progress at Johnson City operations looking to the production of Bessemer pig and its manufacture into rails. The adaptability of the North Carolina ore for the manufacture of Bessemer pig is now no longer a question of conjecture, and when such men as Wilder Carnegie and others of like character, decide to build Bessemer works, the problem may be considered as already solved.

HARVEY & PRATT, River Bend, Ala., desire the address of manufacturers of split rattan seats for chairs; also dealers in sand used for grinding and polishing handles,

## Bristol, Tennessee-Virginia.

### The Twin City, Into Whose Gates the Great Tide of Development Is Flowing.

#### A Prosperous Place With a Brilliant Future.

[Spec.corresp'dce MANUFACTURERS' RECORD]

It is a little novel to the newcomer to find that here he walks down one side of the street in the State of Virginia, and crossing over goes shopping in Tennessee. Main street is built up on both sides for several blocks with fine store houses. Every time the Tennesseans erect a nice building on their side some enterprising Virginian comes to the front and proceeds to erect one equally as imposing. The result is that every new structure on one side means two for the town proper.

#### RAILROAD RIVALRY.

Here in the heart of Bristol two great railroad systems meet and interlock on through traffic, working together very harmoniously, but upon the question of freight originating here there are active efforts made by the Norfolk & Western to carry it over their line, while the East Tennessee, Virginia & Georgia, with jealous and watchful eye, makes every effort to get a haul out of it. This is a decided advantage to the place, to be supplemented at an early period, when the Danville & East Tennessee Railroad, now under construction from Bristol to Danville, Va., is completed and ready for business. This road is an extension of the Atlantic & Danville Railroad, recently opened up to traffic and travel between Danville and Norfolk, Va.

There is to be an election held the 6th of April upon the question of subscribing the sum of \$110,000 to this railroad enterprise, and the result can now be safely stated as undoubtedly to be favorable to the subscription. The Norfolk & Western Railroad is already anticipating the coming of so formidable a rival that will link by an air line its two most important terminals, Bristol and Norfolk, by securing valuable terminal facilities here in the city at a cost of some \$20,000. I have it from good authority that they will begin at an early day the erection of a handsome and imposing depot. They intend to make the game a high one for all newcomers, thereby securing much favor with the people of this enterprising town. Another new road that is enthusiastically and substantially supported, the citizens of the town having taken some \$200,000 worth of bonds, is the Bristol, Elizabethton & North Carolina Railroad. This road, starting at Bristol, will run nearly due south to Elizabethton, thence up the Watauga river into Johnson county, tapping the rich iron properties of Doe mountain. A branch will be built from Elizabethton to the Embreeville iron property. Bristol has another railroad already in operation that occupies a unique position with reference to its industrial growth. The South Atlantic & Ohio Railroad is already constructed to within a few miles of Big Stone Gap, where the future coal and coke supply of this immediate section is largely to be drawn from, both on account of its cheapness and fine quality. Along the line of this railroad are some valuable iron properties. Its destination is to a junction with the Eastern Kentucky, being a part of that system.

#### BRISTOL'S INDUSTRIAL FUTURE.

Already the plans have been matured and the contracts made for the erection of iron and steel works by a strong company with one million of dollars capital. Bristol has been the gateway through which immense quantities of rich ores from Tennessee, Georgia and Alabama have passed as far as Pittsburgh, Pa. Thousands of

tons of coke pass through Bristol from the Pocahontas flat-top coal fields to the furnaces of these States. This will likely continue, but it is a fact that within every direction there lie within easy access of this town inexhaustible quantities of every class of iron ores for making the finest grades of iron and steel. The cost of mining and laying these down at the furnace will be little more than 75 cents a ton. These ores assay at from 50% to 65% metallic iron. It is estimated that coke from Cumberland Gap equal to Pocahontas product can be put down here at \$2.50 a ton. Thus it will be seen that with the advantages of an exceptionally high grade of material at a lower cost than many places can obtain, when the great struggle comes for making iron and steel either at the lowest cost or the greatest profit, Bristol will have exceptional advantages.

#### BRISTOL'S INDUSTRIES.

There is under contract an iron furnace to cost \$300,000. There are in operation extensive car shops, three large flouring mills, two foundries, one woolen factory, one cotton factory, a carriage factory, a veneer factory, a canning factory, several planing mills, three brick-yards.

Bristol is situated in one of the richest agricultural belts in all the Southern country. There are marketed here annually some three million pounds of tobacco, large quantities of grain and every class of farm product. It is situated in the blue-grass region, and stock raising is an important and very profitable industry. There are some 5,000 horses and mules and 3,000 head of cattle brought to market here yearly.

#### CITY APPOINTMENTS.

Bristol has all the appointments of a city of a much larger population. Its street-car system, passing along the main street out to that splendid hostelry, the Hotel Fairmount, affords cheap and rapid transportation to that charming suburb. This hotel is one of the most solidly constructed and best appointed in the country. It is outwardly ornate and beautiful, sitting upon a commanding mound within a natural park. All the furnishings and appointments are of the most modern and pleasing kind. The parlors are beautifully furnished and well lighted. The ball-room is one of the most charming popular features of the house. This house is already a resort of much popularity in winter, and especially so in summer. The guests are furnished free the health-giving waters of the bromine-arsenic spring, celebrated for their medicinal properties. The proprietors are erecting a handsome building to be devoted to ten-pins in one part and a billiard hall in another. The conservatory is filled with beautiful plants and is a charming addition to the other surroundings of the hotel. The management is under Mr. Geo. L. Jacoby, a hotel keeper of great popularity by reason of his kindly and considerate thought of the comfort of all those who find a temporary abiding place within his house.

With such a hotel in the midst of beautiful lands, surrounded by numberless views refreshing to the weary, stimulating the imagination of the thoughtful, Fairmount is bound to be the resort of pilgrims to the fountain of health or the investor to the land of prospective wealth. Already the number of elegant residences within the neighborhood of the hotel establishes the fact that this is to become the aristocratic part of Bristol.

The Bristol Land & Enterprise Co. owns some 308 acres in the northwestern part of the city. The company has employed an expert engineer, who came from New York city for the purpose of platting this property in the most attractive style. When his work is completed this company will possess one of the handsomest properties topographically and scientifically, in this

section. Of this I shall speak more fully hereafter.

The city has ample water works, supplying pure water from a spring. An electric-light plant illuminates the principal thoroughfares. The Young Men's Christian Association building and some 12 churches are a fair index of the city's moral status. A handsome opera-house affords diversion. There are two live morning daily papers full of enterprise and snap, and also an afternoon paper contributing its share to the life of the place. The efforts of these enterprising publications are supplemented by two weekly newspapers. While these details may seem to be uninteresting, yet to the man looking for a home, who prefers an organized community to an absolutely new town, these attractions have a value not to be underestimated.

#### ENTERPRISING CITIZENS.

In every community there is a small coterie of men who carry its banner to the front in every good undertaking, fight its battles and modestly retreat to the background when the tide of success seems flowing toward their town. Major A. D. Reynolds is the one man in Bristol who has but one idea, and that is a laudable ambition to see this place attain its proper position as a thriving, prosperous city, with a population commensurate with the advantages it offers. In a conversation with me, when the question of investment was being discussed, together with present and prospective values, he emphatically declared himself as being unwilling to sell his extensive interests here, either in a large or small way, to anyone if he knew that he would not be satisfied, and that the venture would not prove profitable ultimately and contribute to the upbuilding of the place. He is associated with his brother, Mr. R. J. Reynolds, the wealthy tobacco manufacturer of Winston, N. C., and Mr. Jas. M. Barker in the ownership of extensive holdings of property in and adjacent to Bristol. They gave to Bristol that splendid hotel, Fairmount, and in many ways have contributed to the growth and prosperity of the city. Mr. Barker is a gentleman of fine judgment, a good organizer and fully imbued with the spirit of enterprise.

I have met here one of the most noted men in the real estate business within the borders of the booming South, W. A. R. Robertson. There is no man more fully awake to all the details of building up either an old or a new community than this gentleman with so suggestive a pseudonym, "War" Robertson is largely attracting the eye of the public to the growing town of Bristol. His advertising bureau is conducted upon original and effective lines. He has control of some of the most desirable properties in Bristol, and, as his name suggests, tends rather to the aggressive—always ready for a march farther on the road towards prosperity, and he believes in an advance in values throughout this section. He has conducted some of the most successful sales of large properties in Bristol, and is ready to back his judgment of values with his purse. For instance, he sold a man a lot yesterday evening for \$675, and in the afternoon of the same day paid him \$100 for his bargain. Another purchaser at the same auction sale refused his offer of \$100 advance for a lot purchased for \$900.

In another letter I will tell more particularly about properties and values.

PERCY CLARK.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises and needing machinery or supplies of any kind will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

## FORT PAYNE'S PROGRESS.

### GREAT BUILDING ACTIVITY.

#### Further Development of High Grade Iron Ores.

[Spec.corresp'dce MANUFACTURERS' RECORD.]

FORT PAYNE, ALA., March 22, 1890.

For a month past the weather at this point has been so unfavorable that it has seriously interfered with building operations. It has been unusually rainy and cold for this season of the year. A change occurred for the better yesterday, and there was an immediate renewal of activity.

Prof. Brainerd, of Birmingham, has just furnished the officers of the Fort Payne Coal & Iron Co. with an analysis of the brown ore deposit discovered a few weeks ago near the furnace. The analysis is as follows:

Metallic iron.....	59.28
Silica.....	1.80
Phosphorus.....	0.499

He adds a note: "This is a very rich ore."

This deposit is said to be in a bed nearly or quite twenty feet in thickness. The ore is much richer the further the miners cut their way in from the outcrop. Immediately under this bed of brown ore a black ore has been found, which shows the following analysis:

Metallic iron.....	56.723
Silica.....	10.400
Phosphorus.....	0.168

The extent of this deposit is not yet known, as it has not been fully developed.

The Frambes Lumber Co., of Atlantic City, N. J., are at work on their building, and expect to be ready to begin operations inside of thirty days. This plant will be a very extensive one.

The Dustin-Hubbard Machine Works are moving along with their buildings, and expect to be ready to begin business about the middle of May.

The foundations of all the buildings of the Foster Builders' Hardware Co. have been completed, and work on the superstructure of several of them begun. The pattern vault is nearly ready for the roof. The brick wall for the main factory, 50x200 feet, and three stories in height, is being laid.

The fire-clay works have 300,000 fire-bricks ready for the coke ovens. They have a contract to furnish an additional 100,000 for the ovens.

It is believed now that the coke ovens will be completed and ready to go into operation about the 15th of May. Work on them has been seriously retarded by the bad weather.

The furnace and rolling mill are progressing satisfactorily. The furnace will be ready to blow-in about the time the coke ovens are finished.

Residence building is now receiving a great deal of attention. It will be necessary to build at least 1,500 more houses to accommodate the laboring men who will be required to put the industries into operation as soon as they are completed.

A number of English capitalists have visited Trenton, Ga., during the present week, their object being to purchase 2,700 acres of mineral lands owed by the Eureka Land Co. This tract lies in the same valley as Fort Payne.

At a meeting of the board of directors of the Fort Payne Coal & Iron Co., held in Boston last Monday, the following officers were elected for the ensuing year: President, Col. J. W. Spaulding; 1st vice-president, Gov. D. H. Goodell; 2nd vice-president, Hon. Henry B. Peirce; secretary, Henry T. Pope; treasurer, F. H. Tobey; general manager, C. O. Godfrey. All of the old officers were re-elected save C. L. T. Steadman, the secretary, whose place was filled by Henry T. Pope, of this city.

J. M. V.

## LAKE SPRING

One of the Attractions of the Booming City of Salem, in Virginia.

A Talk with Mr. Wm. M. Nelson, a Prominent Promotor of Salem's Progress.

### A SOUTHERN SWITZERLAND.

[Spec. correspond'ce MANUFACTURERS' RECORD.]

SALEM, VA., March 21, 1890.

"At Salem," said my friend Mr. Wm. M. Nelson, "we have another exemplification of the tendency of towns to grow Westward. Roanoke used to be seven miles from Salem; but it has grown this way till there are left only about three miles of farm land between the two towns. One would have naturally supposed that Salem would grow toward Roanoke, but the indications all point to much more building on the west side than to the eastward."

"But in the case of Salem," Mr. Nelson went on to say, "there are other causes for this state of things more effective than the general rule that all cities grow from East to West. One of these is the situation of the great Lake Spring, which is nature's greatest boon to the town. Another is the lovely environment in that direction, the topography of the country adjacent to Lake Spring being as perfect as can be conceived of."

The foregoing remarks were made in my hearing about a month ago, and when, on my return to Salem this morning, I discovered that the building lots of the Lake Spring Land Co., which Mr. Nelson has since organized, are being eagerly taken by prospective homebuilders, what he had said, as given above, was naturally recalled.

The story of Salem will probably rival that of her twin sister, which in 1880 had four hundred people, but where there are to-day far on to twenty thousand. And the same factors which have figured during the last decade so conspicuously at Roanoke, that phenomenal city of this "Old Dominion" (now being so rapidly rejuvenated), are at work at Salem; but with this difference—Salem's promoters have the benefit of a valuable experience, the absence of which at the outset seriously retarded Roanoke's growth.

Besides being backed by an abundance of money and resources, Salem is particularly fortunate in the men who are pushing it forward, who are converting this insignificant village into an important industrial city. The real estate men at Salem, as well as the managers of the various industrial companies, know their business and realize their duties, and cheerfully bear those burdens which in all new towns are forced upon the shoulders of these indefatigable toilers. There has been organized a real estate exchange with a membership of ten reliable firms, and its rules, which are rigidly enforced, were formed with a view to protect buyers. Indeed, it is no more than the facts warrant to say that a stranger sending an order for an investment at Salem without ever seeing the place will stand as good a chance to make money as the man who makes his own selections. This, however, is the case at Glasgow, and at Buena Vista, and at one or two other points in Virginia. Mr. Wm. M. Nelson, the general manager of the Lake Spring Land Co., is vice-president of the real estate exchange, and it was largely through his efforts that this excellent auxiliary to the prosperity of the place was organized. Mr. Nelson, however, handles real estate generally. Col. A. M. Bowman, a partner of George W. Palmer, the Saltville (Va.) millionaire, is president of the Salem Real Estate Exchange.

Since the vexatious litigation concerning

the option on a portion of the property of the Salem Improvement Co. has been settled, the activity here has assumed proportions which virtually guarantees the creation of a city of 10,000 people within a year. And it is a rather remarkable fact that the people of Roanoke, instead of feeling jealous of and ill-natured toward Salem, are heavy investors not only in real estate, but in enterprises to be here located. In fact, the president of this Lake Spring Land Co. is no other than Capt. M. M. Rogers, the widely-known street railway magnate of Roanoke, and the president of the dummy line which is to connect Salem with Roanoke is Col. C. O'Leary, that irresistible "little giant" among the real estate operators at Roanoke. So far as this Lake Spring property is concerned I venture to say that at least half the stockholders are residents of Roanoke.

Apropos of non-resident investors here, it would surprise a Northern man to see how many deeds have recently been recorded and mailed to parties residing all the way from Maine to Minnesota. The truth is, Salem seems to be a great favorite with Northern and Western investors, and in view of the fact that the Baltimore & Ohio Railroad will without doubt be soon extended from Lexington to Salem, the wonder is that more of your Baltimore neighbors have not put money into Salem.

It is seldom that I depart from my "straight and narrow path" as a newspaper writer to volunteer direct advice to the readers of the MANUFACTURERS' RECORD; but I am so thoroughly satisfied that the future of Salem will "pan out" profitably that if I were asked whether it would pay to buy property here now I should, without hesitation, make an unconditional affirmative reply.

One word more concerning this Lake Spring, which is situated about half a mile west of the center of the old town. It flows forth from the hillside clear as crystal and in volume sufficient to water abundantly a city of 25,000 people. The company owning the adjacent lands (i. e., the Lake Spring Land Co.) owns about 600 delightfully situated lots all close to this Arethusan fountain.

These lots can be bought at about \$500 (on an average) to-day, and within thirty days they will go to an average of \$1,000. That is my opinion. Why do I think it? Because this particular neighborhood is destined to become the most high-toned and aristocratic in the vicinage of Salem. Because the view is enchanting. Because there's to be a restriction as to the cost of improvements. Because Wm. M. Nelson is the general manager of the property; and as I have a dozen times declared, there are some men who always lose no matter what the conditions may be, and there are some men who never fail to win. Among the latter are my friends, Jas. S. Simmons, of Roanoke, and Wm. M. Nelson, of Salem.

A moment ago I spoke of the large number of Northern and Western men who have recently invested in Salem. I have just had my attention called to the following letter to Mr. Nelson, from Edgar Freeman, a son of the famous English historian:

Dear Sir—It strikes me that I might be able to sell a good deal for you in England, as I am well known there and I know that Salem is no swindle. Think this over and see if we may not come to some terms. Anyhow, send me some circulars. There is lot of money idle in England waiting for good investments, and I should like to act as your agent over there.

Sincerely yours,  
[Signed.] EDGAR FREEMAN.  
To Wm. M. Nelson, Salem, Va.

In view of the large English holdings in the Norfolk & Western Railroad Co., the chances are that English money will soon find its way in large amounts to this Southern Switzerland.

THOMAS P. GRASY.

## SAN ANTONIO, TEXAS

Industrial Capabilities of an Attractive and Growing City.

Unsurpassed Advantages for Cotton and Woolen Mills, Tanneries, Boot and Shoe Factories and Paper Mills.

[Spec. correspond'ce MANUFACTURERS' RECORD.]

San Antonio, situated in the midst of the finest cotton-growing section of the State, with railroads traversing the chief wool-growing sections of this State and of Mexico, and her ample water power and rich deposits of coal in the surrounding country, must, in the near future, become a great manufacturing city. Fortunate, therefore, will they be who first plant their cotton and woolen mills along the banks of her dashing river and utilize its waters now rushing heedlessly on to the sea, thereby securing the best locations and the most available power and the prestige of pioneers in the work. As a point for the manufacture of cotton and woolen goods, no city in this State, and but few out of it, possess equal advantages. The cotton crop of the last year, though the acreage was small and the season unfavorable, greatly exceeded that of the year before, showing an increase of the number of bales handled at San Antonio of about 10,000, and bringing the aggregate number of bales handled in this market last year to about 25,000. This amount will be largely increased the next year, for a much more extensive acreage will be planted, and the late rains indicate heavy crops this season. So that, with prevailing prices, especially if we had factories here to consume the raw product, we may safely calculate that in two years from this time the amount above given will quadruple.

The wool receipts for the last year amount to about 30,000 bags, notwithstanding much of the clip which usually comes to this market was decoyed off to some of our sister cities by extraordinary inducements, which are not likely to be offered in the future, and which would never have been if we had a woolen factory here to spin and weave it into articles of prime necessity, for no people have a greater pride in home enterprises or take more interest in home industries than do ours. With an abundant supply of the raw material at hand, with a market at the factory doors for every yard of cloth turned out from the looms (or with the home trade and the trade of Mexico secured for this market orders would come in faster than they could be filled), what is there in the way of a successful operation of manufacturers of both cotton and woolen goods? It surely cannot be the lack of water-power, for with the head springs of the San Antonio river just three miles above the center of the city, discharging by estimation, based on mathematical computation 75,000 gallons of water every second, or 270,000,000 every hour, with a fall of 12 feet for every lineal mile or 6 feet for every mile measured with the meanderings of the river, and continuing on for miles below the city at the same rapid descent, there must be an abundance of water-power, if properly utilized, to drive innumerable wheels. Then, too, if steam-power is preferred, coal can be had from the coal beds a few miles distant, and traversed by one of our main lines of railway, at a cost of about \$3 per ton. As to operatives, we have here a class of people neat and skillful in every species of artistic workmanship, who would soon become most expert operatives in every branch of labor at small wages. There is no race of people anywhere to be found who surpass the Mexicans in dexterity of execution and in elegance of finish in all the finer mechanisms and artistic works. Quick in con-

ception and ready in execution, these people, who compose no inconsiderable portion of our laboring classes, would rapidly learn the work of factory operatives and at wages much smaller than those paid for the same work in Northern factories. But vast opportunities are afforded not only for cotton and woolen mills, but for almost every species of industry in which capital and labor combined can find a fitting reward.

Vast quantities of paper of every grade are annually consumed here and in Mexico, while our prairies actually groan beneath the weight of grasses easily worked up into the coarser fabrics, with wild hemp of large and vigorous growth abounding all over this section, and not a paper mill south of St. Louis!

Tanneries, boot and shoe and saddle and harness factories it seems to me would find their very home and native seat here in this "Gem" of the Southwestern prairies, from which millions of hides and pelts are annually shipped to the North and East to be tanned and worked up into boots, shoes, gloves, &c., and returned to us at the cost of two freights and charges of various middlemen added. Liberal subscriptions to stock will be made by our business men and wealthy citizens in any or all of such enterprises, and I am assured by them that any company or companies coming here to start enterprises of this kind will find them ready to take stock in equal amounts with them to any extent, while liberal concessions will be granted in the way of exemptions from taxation by the city government.

ELIAS EDMONDS.

### Progress in a South Carolina Town.

[Spec. correspond'ce MANUFACTURERS' RECORD.]

FLORENCE, S. C., March 21, 1890.

I have been expecting for some time to write another letter from this point, but have been waiting for a cut of the new courthouse with which to illustrate it. The building is about finished, but the debris is not yet removed, and it would spoil the effect if the picture were taken now, so I will leave it for a time later on.

Since my last, Florence has "boomed" a real new, fresh and vigorous boom, a boom which will last, for it is not "the baseless fabric of a vision," but a boom where the people are buying and building themselves homes and making a solid march of improvement. For some time the town has been taking on new life. The new county has formed, the courthouse started, the jail built and new residences erected. About two months ago the Carolina Real Estate & Investment Co., of which C. E. Janotian, an old resident of this place, is president, and Mr. L. O. Jones, of Vermont, is secretary and treasurer, was formed, and purchased nearly four hundred acres of choice land in and adjoining the town. Last week they advertised for the first time and stated that on Tuesday the 18th they would commence a sale of land on easy terms to enable all to obtain homes. The first day's sale was something of a revelation to the people here, as nearly fifteen thousand dollars' worth of property was sold, and the sales continue at about one thousand dollars per day now. The authorized capital stock of the company is \$100,000. The books were open only one day, and sixty thousand dollars' worth of the stock was taken and paid in at par. Since then none has been put on the market, but the intention of the management is, I believe, to float it in the North, for the purpose of raising money to erect homes for the purchasers of their lots. This will make the stock more valuable and will enable them to pay heavy dividends.

Another real estate company is being formed by several prominent holders of property, Mr. Jerome P. Chase, the old

real estate wheel-horse of Florence, being the prime mover in it. Primaries were recently held in the town for the purpose of nominating a candidate for intendant of the town, and Mr. Chase received nearly five votes to one for his opponent, thus showing his popularity in the town. The company, when completed, will undoubtedly be a strong one.

The tobacco factory will soon be built, bids having already been advertised for. A street railway contract has been made with the town council, and the ties already contracted for and correspondence opened with prominent manufacturers and construction companies.

Water works are also causing considerable discussion on the streets, and in the near future they are expected to be an accomplished fact. The park is being laid off and improved, and innumerable enterprises are coming to the front.

Rev. B. G. Covington has opened some valuable mineral springs on his farm at the edge of town, and proposes to make a fine resort there, with hot and cold baths, etc.

The town is, as I said before, booming, and those who desire a change can do no better than to take a look at the future of this rising community.

JOHN P. COFFIN.

### EDISON'S PROPOSED INVESTIGATIONS.

**The South a Great Field for the Exercise of Inventive Genius.**

[Spec. corresp'dence MANUFACTURERS' RECORD.]  
CHARLOTTE, N. C., March 16, 1890.

It is now almost six weeks since Mr. Thomas A. Edison came to Charlotte. He has offices on Trade street, and most of his time has been occupied visiting the gold mines in various parts of Mecklenburg and adjacent counties.

Your desire for any information as to his work or plans was communicated to him to-day, and in reply he said his plans were not yet formulated. He has visited seventy-eight mines, and out of this number has selected six, at which he will make some further and more detailed investigations. If these investigations are satisfactory he will then proceed to develop these mines in a comprehensive way. Assuming that ore will be obtained, when a sufficient amount is accumulated to justify it, he will then build a reduction works, in which he will operate a new process for the reduction or concentration of sulphuric gold ores.

His work may be said to have been and still is in the nature of investigation. He cannot now say what will be the result of these investigations. His interest in the subject is probably due to a desire to apply the new process of reduction above referred to, which is both electrical and chemical.

Before the development of the mining interests of the West, Charlotte was the most important gold mining center in the United States. A government mint was for many years operated here, and the building is still maintained as an assay office. While the volume of mining in the West has for several years overshadowed that of North Carolina, Charlotte has, nevertheless, always been a point of interest to gold miners. The ores, however, are difficult to reduce, and much of them have been sent as far as Swansea, Wales, for reduction.

With a successful reduction works at Charlotte, it has never been doubted that the gold mining interest would develop into one of large proportions. The quantity of obtainable ores are said to be for practical purposes unlimited, and Mr. Edison's present work is for the purpose of verifying the truth of this statement. He takes nothing for granted, but begins at the beginning and verifies for himself the existence of such materials and conditions as are necessary for the success of his future enterprise.

He leaves Charlotte to-day for the North for the purpose of selecting such machinery and tools as are necessary for his investigations at the six mines. He will be absent about six weeks, and then returning will be in Charlotte more or less for an indefinite time.

From the above it will be seen that information as to his works and plans is impossible at the present time. He has preliminary work to do, and his plans will depend upon the result of this preliminary work. If it is satisfactory he will build large reduction works; if not, he will give his attention to other subjects here or elsewhere.

With reference to other subjects, he has talked of two which are of importance to the South, viz., picking cotton and the treatment of the products of cotton seed.

On the subject of picking cotton Mr. Edison had a long conversation with Mr. C. T. Mason, the inventor of the Mason cotton harvester. He was much interested in Mr. Mason's machine, and, in turn, explained several ideas of his own on the subject, but said that he was not familiar enough with cotton in the field to attempt to develop his present ideas practically. During the coming summer and fall he will observe how cotton grows and how it is gathered. Then he will be in shape to think and experiment. He thinks the problem may not be more difficult than was the one of developing the present reaper and binder, but that the effect of a successful cotton picker would be probably even more far-reaching. His work in this line, if he determines to undertake it, would undoubtedly be of far more interest to the South than any other work he could undertake.

Simply in an experimental way he will put one of his assistants to work at his laboratory in New Jersey on cotton oil; first, to learn its value as compared with other cooking oils or greases, then to find if its marketable forms can be improved. He has visited the works of the Charlotte Oil & Fertilizer Co., and the necessary materials have been sent to his laboratory in New Jersey for making the experiments above indicated. He is especially impressed with the fact that cotton oil, excepting only possibly olive oil, is the purest culinary grease possible to obtain. It is purely vegetable, is free from all possibilities of animal disease, and the process of its preparation is absolutely clean; while hog lard may be, in many ways, contaminated by disease of the animal, and the process of its preparation is disgustingly unclean.

Mr. Edison has spoken several times of having some intention of establishing a laboratory in Charlotte in connection with his present offices.

D. S. TOMPKINS.

**HON. HENRY WATTERSON,** the distinguished editor of the Courier-Journal, was at Middlesborough, Ky., the other day, and in an interview with a reporter of the Middlesborough News, he said:

I am thoroughly delighted that I came to Middlesborough. I have heard and read much of the place, but I was not prepared for what I have seen. It is remarkable to see such a city grown up in nine months, although I have always contended that Southeastern Kentucky is the richest portion of our entire country. The work that I have seen going on is marvelous, and when I observe people moving mountains, digging canals, filling creeks, erecting handsome buildings, macadamizing streets, building furnaces and other important industries, I am forced to the conclusion that Middlesborough is destined to become one of the great manufacturing and commercial centers of the South. I am surprised at

what I have seen, and I am delighted that I have come here that I might know these things as they are. I hope to return sometime in the summer and spend two or three weeks in your mountains.

### BRIDGEPORT, ALA.

#### A Brief Review of its Attractions and Capabilities.

[Spec. corresp'dence MANUFACTURERS' RECORD.]

BRIDGEPORT, ALA., March 24, 1890.

If "seeing is believing," there is little to wonder at in the fact that these people down here are convinced that their lot has been cast in a field of golden opportunities.

I have been in nearly every nook and corner of the United States, and have made a business of investigating the claims of localities noted for their mineral, agricultural, timber, manufacturing or commercial resources and possibilities, and here, in the Sunny South, where the balmy air is laden with fragrance, and every hill, valley and rock is surrounded with a halo of historic interest, I find a condition of things that is startling when considered from a cool, calculating, commercial standpoint.

Every scrap of intelligence from this part of the country deserves a careful perusal. The published statements that Alabama is a promising field for the investment of capital and an exhaustless one for the expert are fully borne out by facts. If it were not so, would Northern capital continue to flow into the State to purchase and work her mines, to buy her forests and utilize them, and to organize manufacturing enterprises? Business is business every time, and we must look at this section without prejudice in considering its merits for investment purposes.

More Yankees infest the land of Dixie now than was the case twenty-five years ago. And still they come. Parties of capitalists from Northern cities have got to be an everyday affair, and the excursions of bankers and manufacturers through this section would only be conspicuous by their absence. Englishmen with "syndicate" stamped upon their banners are no longer a curiosity. Capitalists and miners, manufacturers and merchants go to make up a community that is characterized by thirst, enterprise and push, backed up by resources richer than the sun ever shines upon elsewhere outside the pages of fiction.

#### THE "IRON STATE."

Alabama has long been known as the "Iron State," a title that will increase in significance, from time to time, as the value of her vast mines becomes more generally known and more fully appreciated. Alabama is peculiarly rich in her extraordinary deposits of iron and limestone and her vast coal fields. These have been placed in such convenient relations to each other, and at such altitudes above the general land level, as to make the cost of mining and of converting the ore into pig iron, much less than in other parts of the world, not excepting those even where starvation wages are paid.

Another peculiarity of this inexhaustible iron district is that the land is, in much of it, fertile and susceptible of the highest cultivation, so that in time the whole surface may be converted into gardens, fields and orchards and supply a large part of the food required by the thousands employed in the manifold industries that follow rapidly the development of the iron interest. How quickly new enterprises are established where iron is abundant and cheap is illustrated in a score of towns in this great iron region.

#### A FAVERED SPOT.

In a country the size of the United States it is not a difficult matter to find a locality which includes in its list of attrac-

tions more than one feature of special interest, but usually some one particular excellence characterizes each particular place. In one is found an even, delightful climate, where the invalid recovers his wasted energies; in another the scenery attracts the lovers of nature's charms from all parts of the world. Another place may achieve renown from its wealth of soil and agricultural possibilities, another for its commercial and manufacturing facilities and another still from the wealth of its buried treasure. It is not difficult, I have said, in a country like ours to find a place with more than one redeeming quality, but very rarely do we come across a locality that can boast of all these charms.

#### SUCH A PLACE IS BRIDGEPORT.

Here the health-giving, health-preserving climate wins the invalid back to health. The landscape, rich in its charms of mountain, dale and river, inspires the poet's fancy and the artist's dream. Its commercial facilities equal those of any city in the South, with rail and water communication to all points of the compass. And above all, it is built upon a deposit of mineral treasure, the contemplation of which is flavored with a dash of romance of the Aladdin order.

Bridgeport, which is destined to become one of the leading mining, manufacturing and commercial centers of the South, is in the extreme northeastern portion of Alabama, and is situated upon an undulating plateau at a break of the Cumberland mountains, or rather a spur of that famous range, which forms the backbone, so to speak, of this section. Here the fertile valleys of the Cumberland join the valley of the Tennessee. The landscape is one of surpassing magnificence, and as I look upon the beautiful picture, the panorama of the South's past, the stirring reality of its active, bustling, go-ahead present, and its glorious future seems to unroll and spread out before me the scenes of by-gone days and the triumphant results in store for the development and progress now going on.

Appreciating the advantages of Bridgeport as commanding the entrance to one of the richest portions of the Southern country, a fort was built during the war upon the highest point of the plateau, overlooking the river. Standing amid the ruins of this old fort, with the broad tide of the Tennessee flowing fully 150 feet below, the observer views a scene that has in it an inspiration for every mood. The manufacturer sees, stretching in endless line, the deeply indented sides of the mountains, every cove and valley standing thick with timber; the rich alluvial plains white with cotton. Here, within the city limits, a range of seven foot-hills reminds one of those of classic Rome, but bearing a four-foot vein of iron ore; a little farther, yet within easy distance, can be seen the Etna mines, the Dade mines, the Wall mines and the Whitwell mines, all famous coal producers, and the manufacturer needs no further inspiration to see that he is on the site of one of the future great industrial cities of North Alabama. If he needed any further assurance, it could be found in the three important railroads over which 54 trains pass daily, and the river, with its numerous lines of regular steamers to furnish transportation in every direction.

A careful consideration of the mineral products of Bridgeport will furnish the topic of my next letter.

**YAZOO CITY, Miss., March 20, 1890.**—If we can secure the brick, the contractors and mechanics, there will be three large warehouses, schoolhouses and many dwellings built here. Unfortunately we have nothing here to build with except the money.

L. LIPPMAN & CO.

**If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$4.00 a year.**

\* TREDEGAR \*  
 AND  
**JACKSONVILLE, ALA.**

\* The Devonshire of the South. \*

**Richest in Resources of Soil, Climate, Water, Timber and Minerals, of all the Industrial Places in this Section.**

\* AMPLE RAILWAY FACILITIES. \*

**A Favorite Summer and Winter Resort. Beautiful Scenery. Excellent Fishing & Shooting.**

**SUPERIOR ACCOMMODATIONS AT THE NEW AND CHARMING TREDEGAR INN, Conducted by the Company.**

**SULPHUR, CHALYBEATE, LITHIA and MAGNESIAN SPRINGS.**

**At no other Point in the South are like Advantages, Opportunities and Inducements to be Found for the Establishment of**

**Charcoal Iron Furnaces,**

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**Sandstone Quarries,**

**Additional Lumber Mills,**

**Additional Planing Mills,**

**Additional Tanneries,**

**Cotton Mills,**

**Woolen Mills.**

Tredegar and Jacksonville are on the East Tennessee, Virginia & Georgia, the East and West of Alabama and the Blue Mountain Mineral Railways. Ten miles from Anniston, four hours from Birmingham, six hours from Knoxville.

**GREAT OPENING FOR A VARIETY OF SMALL INDUSTRIES.**

For Full Particulars Address

**J. W. BURKE, Pres't, or GOLDSMITH BERNARD WEST, Cen. Man'gr.**

Jacksonville, Calhoun Co., Alabama.

# MIDDLESBOROUGH,

\*————— KENTUCKY. —————\*

“The Wonder of the Age in Town Building.”

**The Future Iron and Steel Center of America.**

THE PASSAGEWAY FOR RAILROADS BETWEEN THE WEST AND THE EAST.

**A SOURCE OF COKE SUPPLY FOR THE SOUTH AND WEST.**

**THERE ARE NOW UNDER CONTRACT:**

A Basic Steel and Iron Plant, daily capacity 300 tons, to cost \$1,000,000 and to employ about 1,000 hands.

An Iron Rod Mill; A Sheet Mill; A Nail Mill.

Two Coke Iron Furnaces, 150 tons daily capacity each, and one Charcoal Furnace.

A \$500,000 Tannery—the largest in the world

Fourteen Coal Mining Enterprises, to employ about \$2,000,000 capital.

A Dozen Wood-Working Enterprises.

A Twelve-Mile Belt Railroad.

Tile Works, Fire and Building Brick Works, and a dozen or more other enterprises.

**\$18,500,000**

**Already Invested in the Development of Middlesborough.**

Other New Industries are Being rapidly added to those already in operation and contracted for.

**COAL, IRON, TIMBER**  
AND OTHER RAW MATERIALS.

**DELIGHTFUL AND HEALTHFUL MOUNTAIN CLIMATE,**

WHERE MALARIA AND THROAT AND LUNG TROUBLES ARE UNKNOWN.

Elevation from 1,300 to 2,400 feet above the Sea Level.

**SURROUNDED BY VALLEYS OF RICH AND PRODUCTIVE FARM LANDS.**

SEND FOR CIRCULARS, PROSPECTUS, MAPS, ETC., TO

**MIDDLESBOROUGH TOWN COMPANY,**  
**MIDDLESBOROUGH KY.**

Manufacturers Attention.

# BRIDGEPORT, ALA.

ON THE TENNESSEE RIVER.

Situated on a Plateau one hundred and fifty feet above high water, it commands a most Charming Panoramic View of the Valley Surrounded by Mountain Peaks.

Complete Drainage. Location Perfectly Healthy. River Navigation Open All the Year.  
Perfect Wharfage. Railroad Freight Rates the same as Chattanooga's.

## Look at the Profitable Investments for Manufacturers.

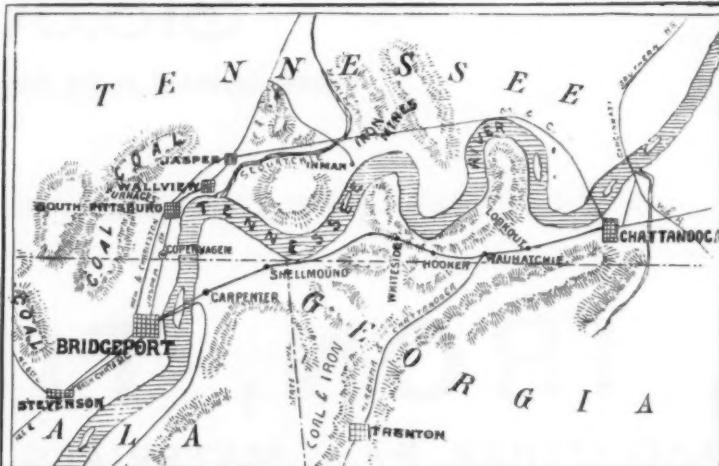
We are surrounded by Unlimited Deposits of the Best Coking Coal in the South; Mountains of Iron; over 80,000 Acres of Mineral Land belonging to this company is covered with Immense Forests of Hard and Soft Woods of the following varieties; Oak, Ash, Pine, Hickory, Poplar, Sycamore, Cedar, Elm, Gum, Red Birch, Sour Wood and Chestnut. We defy competition in variety and quantity of Timber with any section of the United States. We have Building Stone, Brick Clay, etc.

### THREE RAILROADS

Now in Operation.

Three more in course of construction.

Over Fifty Trains Daily.



Six Mails Each Way Daily.

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### SEQUACHEE VALLEY.

Plans are now being Perfected

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**\$75,000 HOTEL**

## OUR GRAND AUCTION SALE OF LOTS

OPEN TO THE WORLD.

**TUESDAY, MAY 6.**

Half-Fare Tickets to and from Nashville and Chattanooga to Bridgeport

DURING THE WEEK COMMENCING MAY 5th.

BRIDGEPORT LAND & IMPROVEMENT CO., Bridgeport, Ala.

# CITY OF GRAND RIVERS, KENTUCKY.

## A New Industrial City of the South.

SITUATED upon a narrow strip of land between the Tennessee and Cumberland rivers near their entrance into the Ohio, practically in the Mississippi Valley, forming a system of river transportation unequalled by any location in the South, being by river or rail several hundred miles nearer the great Western markets. The Newport News & Mississippi Valley Railroad runs directly through the Company's coal, iron and city property.

Chief among its resources are its immense banks of brown hematite iron ore, existing in gigantic pockets and showing enormous outcroppings from leads extending over thousands of acres of the Company's lands, assays from which show metallic iron 50 to 66 per cent, with practically no phosphorus or sulphur.

Pig iron can be laid down in Pittsburgh from Grand Rivers, by reason of its river system of transportation, \$2.50 per ton cheaper than from Birmingham, Ala.

The quantity of coal upon the Company's lands is practically inexhaustible, its measures, eleven in number, ranging from four to seven feet in thickness, and available upon nearly all of the three thousand acres of the Company's coal lands. This coal has been found to possess superior qualities as a coking, steaming or domestic coal.

As a manufacturing center Grand Rivers has no equal in the South. The saving to the manufacturer from its cheap

rates of freight and cheap coal will prove a source of profit equal to a liberal dividend upon his invested capital.

The Company own 21,000 acres coal, iron ore and timber lands convenient to its furnaces, together with 3,000 acres city lands situated upon the banks of both rivers.

Surveys are nearly completed, and the streets are being graded. Industries of various kinds are now locating their plants, and in a short time there will be seen a rapidly growing and substantial city.

A building association has been formed for the erection of permanent brick buildings for business purposes and dwellings, operations upon which have already commenced. A bank is being organized. Two large charcoal furnaces are under contract, and numerous other industries in contemplation.

Thus, with ample capital, Northern enterprise and good management, Grand Rivers will take a prominent position in the great manufacturing cities of the South.

The Company offer the most liberal encouragement to manufacturers wishing to establish plants there, and will give to them every facility in their power to make their enterprises successful.

The city lands are now being platted, streets graded, and everything put into an attractive condition for visitors and investors.

### The Lots will be Offered For Sale APRIL 2d,

WHEN AMPLE ACCOMMODATIONS WILL BE PROVIDED FOR ALL WHO MAY ATTEND THE SALES.

FOR INFORMATION, PRINTED MATTER AND EXCURSION RATES FROM BOSTON, ADDRESS

**BROWN, RILEY & CO., BANKERS, 9 Congress St., Boston, or GRAND RIVERS COMPANY,**  
**Grand Rivers, Livingston County, Kentucky.**

### CAPITAL - - - \$3,000,000.

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VICE-PRESIDENT, - - W. W. SMITH, Nashville, Tenn.

ATTORNEY, - - - JAMES NORFLEET, Grand Rivers, Ky.  
SEC'Y & TREAS., - - JAMES L. HALL, Kingston, Mass.

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# BUENA VISTA.

**The Most Inviting Town in Virginia as a Location for Manufacturers.**

In a Magnificent Farming Country—the Famed Shenandoah Valley—Surrounded by Inexhaustible Wealth of Iron and Timber.

A Wide Diversity of Enterprise, Including FURNACE, STEEL WORKS, ROLLING MILL, PULP and PAPER MILL, TANNERY, WOOLEN MILL, WAGON WORKS, &c., &c., Already Secured.

## Extracts from the Annual Report of the President and Directors, made Feb. 13, 1890:

Every development made upon your Mineral Properties has demonstrated its wonderful wealth of resources, and to-day we are able to say that you have the richest and most valuable mineral property in Virginia, and for extent, not surpassed in the South.

The fertile and extended plains, devoted eight months ago to agriculture pursuits, are now the scene of busy activity, in grading the wide streets of the town, in laying lines of pipes for its water supply, in the building of its handsome and stately business houses, and comfortable and attractive homes.

The waste lands lying along the North River are sites for extensive and valuable manufacturing enterprises, aggregating nearly a million of dollars, already secured, and many more which will be undoubtedly established during the coming year.

Your attractive and well-kept hotel has been found entirely inadequate for the accommodation of its guests, and an addition is now being made which will add about fifty rooms. Its unparalleled location affording charming views of mountain, plain and river scenery, has made it a most desirable resort, and many families expect to make it their summer home.

The valuations, which are submitted herewith, are made by competent gentlemen not connected with the Board of Directors, selected by the Buena Vista Real Estate Exchange, and the prices given are one-fourth less than those paid for lots actually sold for cash in the respective sections.

The plans for the building of the town have been taken with care, and the erection of over \$250,000 of buildings is assured within the coming twelve months, outside of what may be done by the lot owners in their individual capacity.

Whilst the revenues derived from the property might justify the payment of a large dividend upon the stock of the company, your Board of Directors submit it to your better judgment whether it is not wiser to forego a present advantage for a much larger return in the use of these earnings in the future development of the town.

Several large industrial enterprises, employing many skilled workmen, can now be secured for Buena Vista if we are enabled to subscribe liberally to the stock. The benefit to be derived from the location of such industries will ultimately far exceed any dividend which might now be declared.

It is of the first importance that a considerable sum of money be at once devoted to securing an ample supply of water and a complete system for lighting the town. With the assurance to our stockholders that the present revenue shall be devoted to these purposes, the Board of Directors have declined to declare a dividend.

The whole course of the Board in the management of the enterprise entrusted to them has been conservative, preferring to lay the foundation for real future solid worth, rather than to make present speculative values. This policy has been pursued in making the statement and the estimates now submitted to the stockholders; your Board would recommend the continuance of the same policy.

### Receipts and Disbursements to Feb. 1, 1890.

#### AMOUNTS RECEIVED.

Received for Stock .....	\$297,811.38
" " Interest .....	5,917.92
" " Sale of Lots .....	40,890.45
" from all other sources.....	12,355.99
	\$356,975.74

#### AMOUNTS PAID OUT.

General expenses.....	\$ 81,069.12
Expenses of streets and water works.....	10,869.10
Paid for real estate.....	123,608.67
Loans.....	2,000.00
Stock in manufacturing enterprises.....	32,250.00
Cash in bank.....	107,178.85
	\$356,975.74

### FINANCIAL CONDITION.

#### ASSETS.

Value of unsold lots, hotel, office, &c., within corporate limits.....	\$ 591,602.00
Bills receivable.....	65,666.05
Amount due on stock.....	82,496.36
Interest due on stock.....	4,778.42
Stock in industrial companies .....	92,500.00
Open accounts, lumber, &c.....	25,000.00
Inventory—horses, carts, tools, &c.....	1,000.00
Inventory—mining machinery, &c.....	2,145.55
Cash in bank.....	107,178.85
Value pipe line and water works.....	5,000.00
Estimated value of all mineral, agricultural and timber lands, including 1,200 acres adjoining present town site and equally suitable for town purposes.....	1,000,000.00
	\$1,977,367.23

#### LIABILITIES.

Capital stock issued and outstanding.....	782,200.00
Balance due on real estate 1 and 2 years .....	85,000.00
Interest on same to 1st February, 1890.....	3,825.00
Due on subscription to stock in Industrial Co. ....	58,750.00
Due on addition to hotel and office building.....	20,000.00
Surplus .....	1,027,592.23
	\$1,977,367.23

FOR INFORMATION ABOUT BUENA VISTA, WRITE TO

**The Buena Vista Company,**  
BUENA VISTA, VA.

# To MANUFACTURERS.

For the Next Sixty Days.

# BASIC CITY, VA.

Whose Lots and Lands Completely Encompass

The Crossing of the Two Great Coal Carrying Lines of Virginia,

Viz: THE CHESAPEAKE & OHIO RAILROAD, and THE SHENANDOAH VALLEY RAILROAD.

*Will offer EXTRAORDINARY INDUCEMENTS for the removal and Establishment of*

# MANUFACTURING PLANTS.

THE PLAN OF THE

Basic City Mining, Manufacturing & Land Company

*is to secure Substantial Industries before placing a single one of its lots on sale, and therefore during the NEXT SIXTY DAYS the Company will Offer to Manufacturers Greater Inducements than any competing town in the South or West.*

FOR PARTICULARS AS TO THE SPECIAL ADVANTAGES OF BASIC CITY ADDRESS

SAMUEL FORRER, President and General Manager, BASIC CITY, VA.

**Information** as to the financial standing and resources of this Company may be had by addressing the AUGUSTA NATIONAL BANK or the NATIONAL VALLEY BANK, of Staunton, Va.

# PIEDMONT, ALABAMA.

\* Delaware's Southern City. \*

IN THE VERY HEART OF BROWN IRON-ORE DISTRICT.

Full Paid Capital of the Piedmont Land & Improvement Co. \$1,250,000

Large Portion of which will be Employed Establishing Great Industrial Plants.

The following enterprises and industries are guaranteed by the PIEDMONT LAND AND IMPROVEMENT COMPANY, all of which are now well under way:

A 50-ton Charcoal Iron Furnace.  
A large iron Rolling Mill.  
.A Car Wheel Works.  
Three Saw Mills.  
An excellent system of Water Works.

The best system of Electric Lights.  
Graded and Macadamized Streets.  
A \$35,000 Hotel Building.  
A Bank Building, (for Bank of Piedmont),  
the finest in Northern Alabama.

The Piedmont Land and Improvement Company have also closed contracts with two Eastern capitalists, who will at once erect forty dwelling houses, to cost not less than \$1,400 each, which will represent, when completed, together with the ground covered, an investment of over \$100,000.

These will be followed in the near future by the following, negotiations for several of which are now nearly completed:

Two 100-ton Coke Iron Furnaces  
A Basic Steel Plant.  
A Large Planing Mill.  
A Carriage and Wagon Factory.

A Passenger Car Works.  
A Sewer Pipe Works.  
A Brick Works, and several other industries.

Such are a few of the many advantages that Piedmont offers to the manufacturer and to the investor, who are cordially invited to come and examine for themselves.

FOR ADDITIONAL INFORMATION ADDRESS

**Piedmont Land & Improvement Co.**  
**PIEDMONT, ALA.**

# 200,000,000 TONS OF BROWN IRON ORE

IN SIGHT AT

# BLUFFTON,

HIGH, HEALTHY AND HONEST.

GOOD PEOPLE AND GOOD WATER.

LOCATED UPON THE ALABAMA DIVISION OF THE EAST TENN. VA. & GA. RY. SYSTEM.

It is impossible to describe by words the enormous quantity of iron ore that is in sight on the land of this company. Said a prominent railroad man of the South: "I could not believe your statement as to the quantity, (200,000,000 tons in sight), but now that I have seen your ore deposits, I wonder how you put so low an estimate on them."

Prof. Robinson, of Bowdoin College, Brunswick, Maine, says: "I found at Bluffton iron ore in abundance, partly in solid cliff masses containing hundreds of thousands of tons, and partly in the form of gravel and small boulders lying in great banks similar in appearance to the gravel banks of New England. Whether there was as much of the gravel as of the bluff ore I could hardly judge, but it was very clear that the quantities of both were simply enormous."

G. S. Patterson, mining engineer, of Anniston, Ala., reports: "The amount of ore in sight was certainly beyond my expectation, though I was prepared to find a large deposit. The Bluff, as it is called, is a solid mass of ore on the side of a mountain, easily approachable, and can be mined cheaper than at any point in Alabama or Georgia, with which I am familiar."

Mr. Wm. H. Edmonds, of the Manufacturers' Record, says: "As to

the quantity of ore here, I don't suppose that all the furnaces in Alabama could use it up in a lifetime."—See Manufacturers' Record May 18, 1889 article entitled "BILL ARP AND BLUFFTON."

Ore can be delivered at furnaces built here at a cost not exceeding 50 cents per ton.

With high grade ores, analyzing over 50 per cent. metallic iron, delivered at the furnace at the above-named price, is there any possibility of such a place as Bluffton not being able to produce iron at figures which will yield a profit despite the dullest of dull times?

Prof. J. H. Pratt, of Birmingham, Ala., reports on samples selected from our property by Mr. Edmonds and Mr. G. S. Patterson as follows:

The sample of brown iron ore, The sample marked "Gravel Ore"

marked "Bluff Ore," contains— contains—

Metallic iron, - - 52.37 per cent. Metallic iron, - - 53.23 per cent.

Phosphorus, - - 0.782 " Phosphorus, - - 0.931 "

Silica, - - 14.60 " Silica, - - 6.25 "

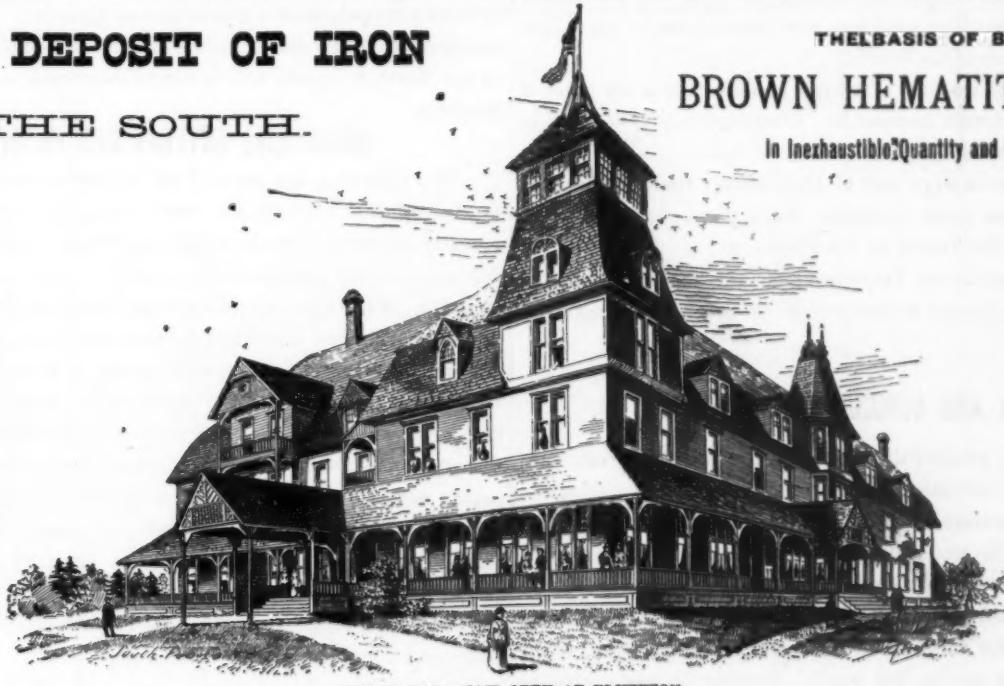
Water combined, - 8.10 " Water combined, - 10.20 "

Moisture at 100° C - 2.50 " Moisture at 100° C - 1.68 "

## LARGEST DEPOSIT OF IRON

IN THE SOUTH.

Ore can be delivered at furnaces built here at a cost not exceeding 50 cents per ton.



THE SIGNAL—NOW OPEN AT BLUFFTON.

## BROWN HEMATITE IRON ORE

In Inexhaustible Quantity and Excellent Quality.

Located on the Selma Division of the East Tennessee, Virginia & Georgia Railway, midway between Rome and Anniston, and only two miles and three-fourths from the East & West Railroad, of Alabama.

## FREE MANUFACTURING SITES.

### Rich Manganese Deposit.

There are several very large and rich outcroppings of Manganese Ore on the company's property, and the deposits have been examined by experts and pronounced exceedingly valuable. Specimens have been sent to various steel works in Pennsylvania, and the result is a large inquiry about the ore. From present development can be seen several hundred tons of this ore. There is always a ready market for manganese, and it is quoted at \$18 to 20 per ton in Pittsburgh and Chicago. More extensive work will be done on these deposits within a very short time, as the banks are easily accessible. Shipments will soon be made.

### OTHER RESOURCES.

#### Fire Clay and Brick Clay—Yellow Ochre.

On this property are large deposits of fire clay, which has stood the highest test. Shipments have been made to Chattanooga, Tenn., and it is pronounced a superior quality. A fire brick works could be established here that would prove extremely profitable.

In brick clay there is an inexhaustible quantity, with an abundance of water running through the clay land. Brick manufacturing here would pay handsomely, and the company would lease the clay beds for a term of years at a very low royalty.

The four charcoal pig-iron furnaces surrounding this property are nearly as valuable to this place as if they were located on the land of the Bluffton Company. The pig iron manufactured by them could be bought and utilized here for every kind of manufactured iron. They are so near that freight on the raw material would be comparatively nothing. Surrounding us, as these furnaces do, it makes Bluffton a centre.

SEND FOR PROSPECTUS. ADDRESS

**Bluffton Land, Ore & Furnace Company, Bluffton, Ala.**

# FACTS ABOUT FLORENCE.

## LOCATION.

Florence is in North Alabama, near the Tennessee line, on the Tennessee river, which is navigable here for large steamers. It is on the Memphis & Charleston Railroad, and the Nashville & Florence branch of the Louisville & Nashville Road.

## AGGREGATE OF ADVANTAGES.

There are many places in the South possessing the advantages of a good climate, healthfulness, natural resources and manufacturing capabilities more happily combined and in a higher degree than can be found in any other part of the country. It is believed, however, that at no point in the South, and hence nowhere in America can there be found an aggregate of so many unsurpassed advantages and attractions as exist at Florence.

## IRON AND COTTON MANUFACTURING.

Florence can make iron as cheaply as any place in Alabama. It has facilities for the manufacture also of cotton goods equal to those of any other place. Anything that uses wood as a raw material can be made here at as low a cost as anywhere in the South.

Thousands of acres of iron ore of a high grade within a few miles of Florence are owned by Florence companies. Limestone is quarried within the town limits. There is enough of it to last for ages.

Cotton mills would get a large part of their supply from the country around Florence. Cypress creek furnishes water power and mill sites enough to make Florence the Lowell of the South.

North of Florence, and up the Tennessee river, there are large areas of timber, embracing a wide variety of hardwoods—forests that the axe has never touched.

## COMMERCIAL AND AGRICULTURAL FACILITIES.

Besides its industrial possibilities, Florence is a point of great commercial importance, and is becoming the center of an extensive mercantile business. It has the advantage of both rail and river transportation and of competing railroads. Several additional railroads are now under construction to open up new trade connections to Florence.

Florence is surrounded by a wide extent of fertile and productive country, as well adapted for farming, stock raising, fruit growing, truck farming, dairying, &c., as any in the world. Further, it has a climate that is delightful the year round. Its health record cannot be surpassed. It has no malaria. In fact, people who live here enjoy a remarkable exemption from ailments of every sort. It has an abundance of the purest water.

## BEAUTY OF LOCATION.

For beauty of location Florence is without a peer. The Tennessee river at this point is as romantic and beautiful as the Hudson. The rolling character of the country, the slopes and hills and alternating valleys furnish a picture to charm an artist's eye. The lovely Cypress creek, a deep and rapid stream emptying into the river just below the town, presents at every turn in its tortuous course a scene of entrancing beauty. The views from some of the higher hills are as fair as the eyes of man ever rested on.

Limited space allows here only the briefest summary of a very few of the more important facts about Florence. For more detailed information write to either one of the following companies. Or better still, come down and see for yourself. Investigation is all that Florence asks or needs.

Lauderdale Manufacturing Co. Florence Cotton and Iron Co.

Florence Investment Co.

Florence Railroad and Improvement Co.

## GROWTH.

Florence is making more rapid progress, proportionately, than any other town in America. This is a strong statement but it is true. And its growth is on a solid and permanent basis.

## SOLID GROWTH.

Florence is not undergoing any wild real estate boom. Its managers are not seeking to advance real estate prices. It is not their plan to get a quick return for the money they have invested, by the rapid sale of lots at unnatural prices. It is their aim to first build up a town, to locate factories and secure a permanent population, when land will have an actual value and sell at prices from which there will not be a subsequent disastrous reaction. At present real estate is much lower in price than in any other town in the South that has made half the progress Florence has made.

## THIRTY NEW ENTERPRISES.

Within the last 12 or 15 months over 30 new industrial enterprises have been located at Florence, with an aggregate cash capital of about \$5,000,000. This remarkable growth is the result of efforts to induce people to simply investigate the attractions of Florence. Investigation and comparison with other places, on the part of any who are looking for a place in the South to locate, will in nearly every case result in the selection of Florence.

## INDUSTRIAL ENTERPRISES IN OPERATION.

The following are some of the industries in Florence. Some of these are in operation; others are nearly ready for work and others have but recently commenced work on their buildings: One of the largest and best furnaces in the United States now in blast, and another under construction; a stove factory; a hardware company, with a capital of \$300,000, manufacturing fine building hardware, &c., the only factory of the kind in the South; a wagon factory, with capital of \$150,000; agricultural implement works; handle factory; woodenware factory; sash, door and blind factories; a cedar bucket factory; a pump factory; planing mills; a factory to make wooden butter plates such as grocers use; a flour mill; a cotton mill in operation, and a \$500,000 mill building and others projected; a jeans factory; a gingham factory; a woolen mill; a cotton gin; a marble company; a roofing and paint company; a shoe factory; a suspender factory; a compress, packet and ferry company; building and loan companies; a canning factory; brick factories; a dummy railroad company, and a number of other enterprises.

## \$15,000,000 INVESTED.

The aggregate capital of the industrial, mercantile and development enterprises in Florence exceeds \$15,000,000.

A year ago the population of Florence was 2,000. It is now about 10,000.

There are more than 1,000 carpenters at work in Florence but they can't build houses fast enough to keep up with the increase in population.

## INVESTIGATION AND INVESTMENT.

*A number of the foremost capitalists and iron and cotton manufacturers, and others, of Philadelphia, Boston and other Eastern cities, after a thorough personal investigation, have just made heavy investments aggregating several million dollars in Florence.*

**Florence, Ala.**

# Morristown, Tenn.

## The Plateau City of the Great Valley of East Tennessee

is beautifully located on a plateau of Bay's Mountain, about equi-distant from the Cumberland Mountains which bound East Tennessee on the northwest, and the Alleghany Mountains which bound it on the southeast, and is 300 feet above Holston River, which washes the north base of the plateau three miles from the city. Its mean elevation above sea level is about 1,350 feet, while the hills and mountains immediately surrounding it rise to an altitude of 1,935 feet, affording views of surprising extent and grandeur, and at the same time so modifying the temperature that the thermometer rarely registers higher than 90° in summer or lower than 10° in winter. Its drainage is admirable, and malaria is unknown. It has nearly trebled its population since 1880, having now about 4,000 inhabitants. It is the commercial and business center of the richest and most extensive agricultural district in the State, where all the cereals and all the grasses

and tobacco are grown to perfection, and where fruits and berries abound. It has hundreds of thousands of acres of uncultivated forests accessible to it, abounding in Poplar, Pine, Hemlock, six varieties of Oak, Chestnut, Hickory, Cedar, Maple, Birch, Beech, Sycamore, Gum, Locust, Laurel, Buckeye, Mulberry, Ash, Cherry and Walnut. *The Celebrated East Tennessee Marble* underlies a part of the city, and it is surrounded with rich deposits of Iron Ore, Manganese Ore, Zinc Ore and Lead Ore. It has been said by one who has made a study of the subject, that within a radius of 50 miles around Morristown every variety of iron ore in the United States can be duplicated, and a coke can be made equal to Connellsville coke. We claim without hesitation that Morristown has in its immediate vicinity richer mineral ores, and a greater variety of them, than any city on the Continent.

### MORRISTOWN

has Railroad Facilities equal to any city between Lynchburg and Chattanooga, and they will be speedily increased by the completion of the Carolina, Cumberland Gap & Chicago Railway, making the shortest possible railway route between the great cities on the Ohio River, Cincinnati and Louisville, and the seaboard cities, Charleston, Port Royal and Savannah. Besides, the Baltimore & Ohio Railway will probably extend a branch to it from Lexington, Va., and the Tennessee Midland will in all probability be built to Morristown, and a line be built giving direct connection with Atlanta.



### MORRISTOWN

has a citizenship composed almost exclusively of native born Americans. It boasts a splendid system of Graded Schools, Five commodious Brick Churches, the finest Courthouse in Upper East Tennessee, an Opera House that will seat 600 people, two Solid Well Managed Banks, a flourishing Building and Loan Association, two of the Largest Commercial Flouring Mills in the South, Stove Works, an Agricultural Implement Factory, two Wood-working Factories, a Tobacco Factory, a Carriage and Wagon Factory, and many industries of lesser note.

It is lighted with electricity, and has water works under contract, and is now inaugurating a system of street railways. Its climatic advantages, its unsurpassed record for healthfulness, its abundance of pure water, its central and beautiful location, its transportation facilities, its fruitful agricultural surroundings, its contiguity to rich and exhaustless fields of iron, manganese, zinc and lead ores, marble, coal and timber, mark it as a place destined to be the commercial, manufacturing and railway emporium of Upper East Tennessee, Western North Carolina and Southeastern Kentucky.

To expedite this destiny the city authorities have wisely exempted from taxation for ten years all manufacturing establishments that will give employment to fifteen or more persons, and the county authorities have done the like, so that manufacturing establishments will be exempt from all taxation for ten years, except the merely nominal tax for State purposes. There has been no "boom" or inflation of prices at Morristown, and, as it possesses within itself and contiguous to it almost every element of wealth, it now presents the most inviting field for investment of any city in the South.

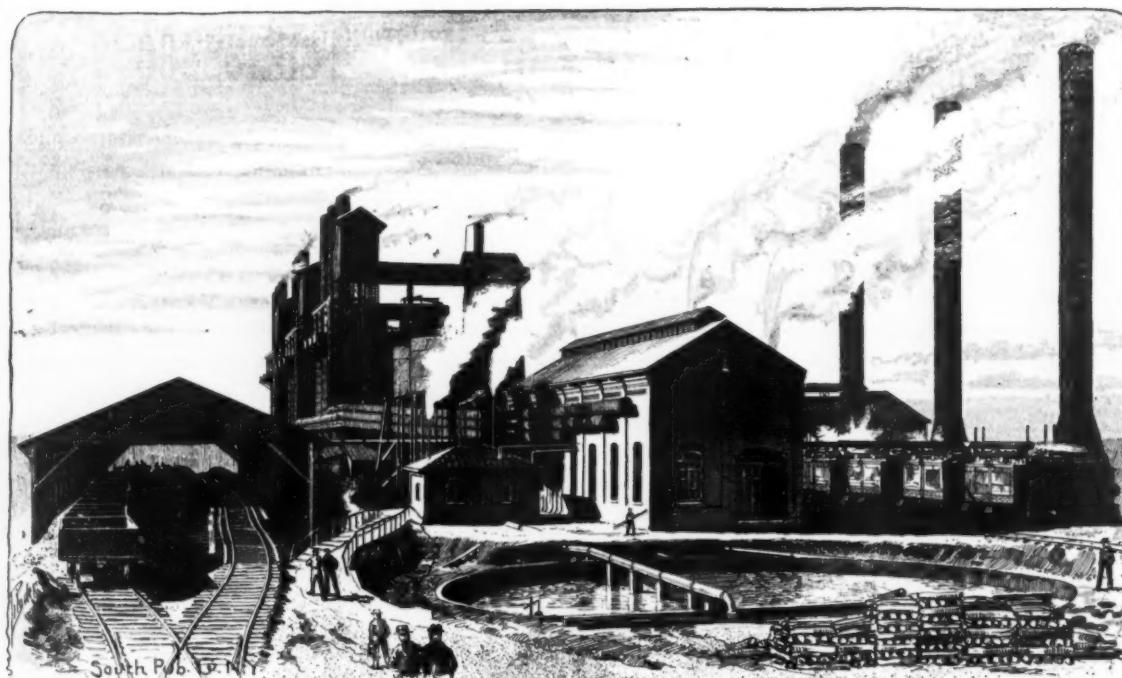
*Persons who may desire fuller information can obtain it by calling on or addressing*

## MONTVUE LAND COMPANY

POSTOFFICE BUILDING,—MORRISTOWN, TENNESSEE.

# SHEFFIELD, ALA.

## THE SUPERB.



The following are among the corporate and private enterprises that belong to Sheffield:  
 The Sheffield Land, Iron & Coal Co., capital \$1,000,000.  
 The Sheffield Land & Birmingham Coal, Iron & Railroad Co., capital \$1,000,000; the owners of three 150-ton blast furnaces.  
 The Birn., Sheffield & Tenn. River Railway Co., capital \$5,000,000.  
 The Hattie Ensley Furnace, capital \$200,000.  
 The Lady Ensley Furnace Co., capital \$200,000.  
 The Electric Light & Gas Fuel Works, \$50,000.  
 The Sheffield Ice Co., capital \$25,000.  
 The Sheffield Manufacturing & Constructing Co., \$30,000.  
 The Sheffield Contracting Co., \$60,000.  
 The Eureka Brick & Lumber Co., \$30,000.  
 The Howard Brick Co.  
 The Sheffield Bakery & Bottling Works.  
 The Sheffield Mineral Paint Co., capital \$50,000.  
 The Sheffield Agricultural Works, capital \$40,000.  
 The Sheffield Cotton Compress Co., \$60,000.  
 Millan Brothers Steam Laundry.  
 Enterprise Publishing Co.  
 Water Works, already expended, \$30,000.  
 Sheffield Street Railway Co., capital \$100,000.  
 Cleveland Hotel Co., capital \$50,000.  
 Sheffield Hotel Co., capital \$120,000.  
 Bank of Commerce, capital \$150,000.  
 East Sheffield Land Co., capital \$500,000.  
 Hull & Keller's Ferry Quarries.  
 Mobile Real Estate Co., capital \$50,000.  
 Sheffield Real Estate Co., capital \$50,000.  
 Sheffield & Mobile Improvement Co., capital \$100,000.  
 Sheffield Stove Works.  
 Henderson Milling Co., capital \$100,000.  
 Globe Iron & Brass Works, capital \$10,000.  
 Standard Machine Shop & Foundry, capital \$50,000.  
 Owen Pink Mixture Co., capital \$100,000.  
 Bell Telephone & Telegraph Co.  
 Foulds' Shoe Factory, capital \$20,000.  
 Enterprise Wood Working Co., capital \$30,000.  
 Buchanan Straw Goods Factory, \$25,000.  
 The Sheffield Harness & Saddlery Co., capital \$50,000.  
 Principal Shops of the Sheffield & Birmingham Railroad.  
 Principal Shops Memphis & Charleston Railroad, now being built.

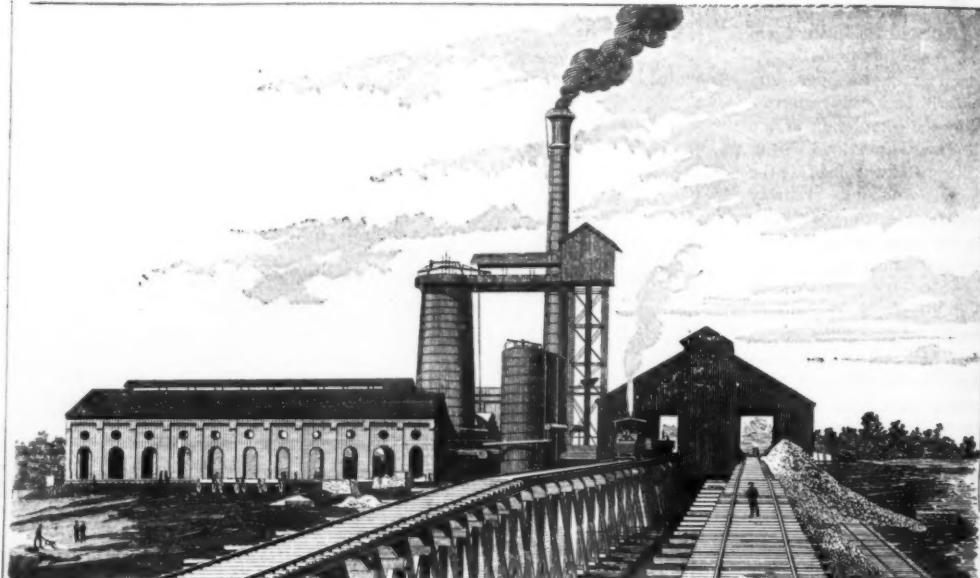
**At the Headwaters of Deep Navigation on the Tennessee River, the Hudson of the South.**

**The Largest Producer of HIGH-CRADE Pig Iron of any City in the Entire Industrial South.**

The only point in the South that has or can ship pig iron to the cities on the Mississippi, Missouri and Ohio rivers by boat or barge without rehandling. This last shipment of **5,000 tons of Pig Iron to Pittsburgh, Pa., by barge** was made at a saving of \$2.65 per ton over what any iron-producing city of the South has done or can do to-day.

### Five Large Blast Furnaces

Capacity 750 tons pig iron per day.



Aside from the foregoing the following are in course of construction and may be considered positive: Principal Shops of the Memphis & Charleston Railroad; Principal shops of the Nashville, Florence & Sheffield Division of the Louisville & Nashville Railroad. Reasonably certain to be secured in the near future are the following, in regard to which negotiations are pending: A Rolling Mill; Large Machine Shop; A Cotton Mill.

## ALABAMA'S IRON CITY.

The Superb Location at the head of navigation on the Tennessee River, commanding the outlet to immense fields of IRON ORE and COAL and magnificent tracts of the finest Timber. Has already attracted to the spot where three years ago in a cotton field her projectors set the stakes of a new city, capital and people, unequalled in amount and number, circumstances considered, by any of the so-called new cities of the South.

With eight Church Organizations, two Free Public Schools, Postoffice, Telegraph and Express offices and abundant facilities of transportation by river and rail. It has every advantage as a residence city that can be desired.

Good Water; Drainage Excellent; Health and Climate Unsurpassed. Free Public Schools and Churches. Splendid opening for men of push and energy. No better point for profitable investment. No "Old Fogey" element here.

### Sites for Manufacturing Enterprises

And for Free Public Schools and Churches

Donated by the Sheffield Land, Iron & Coal Company.

Printed information furnished on request. Correspondence solicited. Communications should be addressed

**W. L. CHAMBERS,**

Vice-President and Manager.

Sheffield Land, Iron & Coal Company,

SHEFFIELD, ALABAMA.

# DENISON, TEXAS.

The "Yankee" City of the Southwest,

— AND —

\* GATEWAY \*

— TO THE —

## GREAT STATE OF TEXAS.

The City of Denison presents the Finest Opportunity of any City in the Southwest for the Investment of Capital in Large or Small Sums.

**D**EНИSON is situated in Northeastern Texas near inexhaustible beds of coal and iron, surrounded by the finest fruit lands in the world, and adjoining the INDIAN TERRITORY, which, in the nature of things, must in a few years be opened to settlement.

The growth of Dennison has been a natural one, the city having reached its present size—16,800 population—in sixteen years.

The city is regularly and beautifully laid out. Railroads run from it in four different directions. The Missouri, Kansas & Texas alone does an enormous business, having 54 miles of switch track in Denison, employing 500 skilled workmen and disbursing \$150,000 a month in wages.

The first public school in the State was established here, and the city's elegant two and three story brick school buildings, surrounded by attractive grounds, are well arranged for the use of the white and colored children. Its schools are in session ten months in each year.

We have sixteen church societies, seven of which are colored.

The city is well supplied with pure water from its numerous private wells—dug in the ground—and its first-class system of water works, giving the citizens ample protection against serious loss by fire, and enabling the insurance companies to rate the city first class as to fire hazard. Rate of taxation low.

The city has four miles of street railway, with six miles now building to be operated by steam motor; has two electric light companies and a telephone plant. It has an influential New England colony, and counts among its citizens people from every State in the Union.

A large hotel, to cost \$125,000, is to be erected here this year, and a large steel plant with \$2,000,000 of capital is contemplated.

30,000 bales of cotton were shipped from Denison in 1888. 200,000 baskets of strawber-

ries and several carloads of peaches and other fruits have been shipped to market this season.

The Denison Canning Co., capitalized at \$100,000, has one of the largest canning factories in the country.

A cotton mill company with a capital of \$500,000 is building a 25,000-spindle cotton mill.

The climate of Denison is magnificent, situated nearly 800 feet above sea level. In summer it is warm, but far cooler than many cities farther North, and from 6 P. M. until after sunrise it is always cool. The city is very healthy.

The capacity of the ice factory has been increased from a daily output of 15 tons to 30.

The Denison Land & Investment Co. is prepared to give every reasonable encouragement to manufacturers, and solicit correspondence from such manufacturers as contemplate coming into the Southwest to locate.

Address all communications to

## THE DENISON LAND & INVESTMENT COMPANY,

DENISON, TEXAS.

Paid-Up Capital, - - - - - \$1,200,000.

### OFFICERS:

W. P. RICE, President.

MILTON H. FRENCH, Vice-President and General Manager.

ARTHUR L. BERRY, Secretary and Treasurer.

### DIRECTORS:

W. P. RICE,  
J. M. FORD,  
A. R. COLLINS,

Kansas City, Mo.  
Kansas City, Mo.  
Denison, Tex.

B. J. DERBY,  
PAUL LANG,  
M. V. B. CHASE,

Burlington, Vermont.  
Oxford, N. H.  
Augusta, Maine.

MILTON H. FRENCH, Thomaston, Maine.  
A. H. COFFIN, Denison, Texas.  
JOS. B. LINCOLN, Boston, Mass.

# FORT PAYNE, Alabama.

★ COME TO ★

## The NEW ENGLAND CITY of the South.

Climate Unsurpassed. Abundance of Pure Water. Drainage Excellent.

No Better Point in the Union  
For Safe and Profitable Investment.

Situated on the MAIN LINE of the QUEEN & CRESCENT ROUTE, fifty-one miles Southwest of Chattanooga, and ninety-one miles North of Birmingham. Elevation is from 895 to 1,600 ft above the sea, and above fever districts.

DeKalb County is entirely free from debt; taxes light.

Most liberal encouragement given to industries of every kind.

Iron Furnace and Rolling Mill will be constructed immediately, and other industries of various kinds are under contract.

Correspondence solicited from those who contemplate coming into the South to establish any kind of manufactories.

The different industries will employ at least two thousand skilled workmen, which will secure a population of over ten

thousand, independent of the many industries contemplated.

Iron of the best quality can be manufactured at as low cost per ton as in any other locality in the South.

Coal and iron are being developed rapidly of a superior quality.

Fine timber abundant and wood-working machinery of every kind can be profitably employed at this point.

The Company is prepared to give every reasonable encouragement to manufacturers who will locate at this point.

 Correspondence solicited.

## CAPITAL \$5,000,000.

### OFFICERS.

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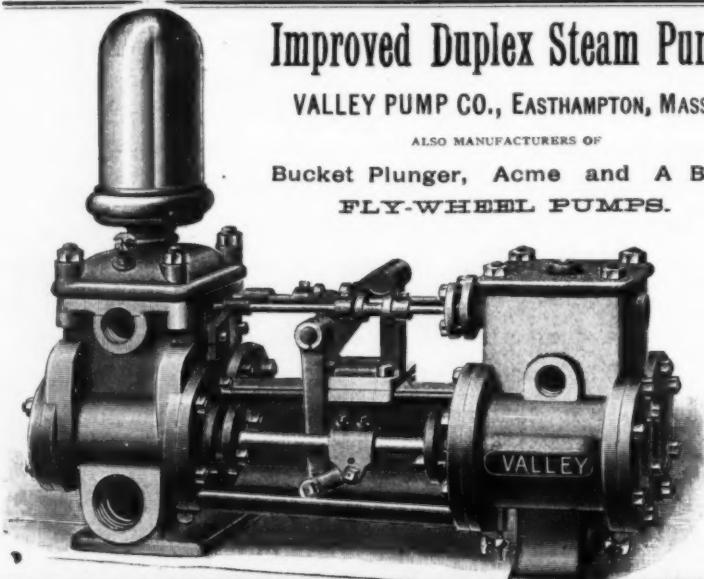


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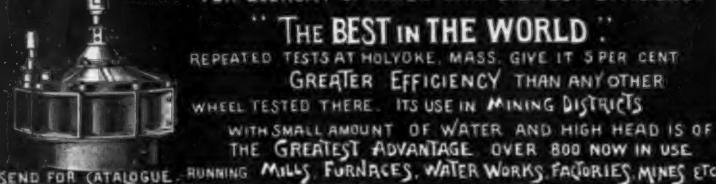
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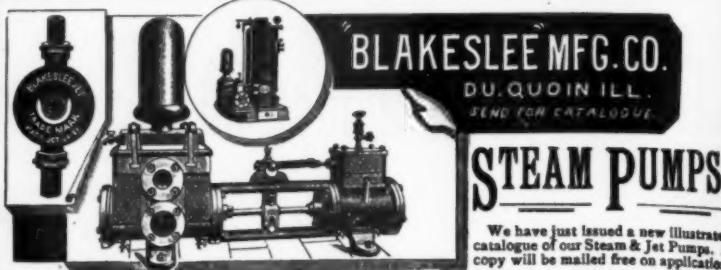
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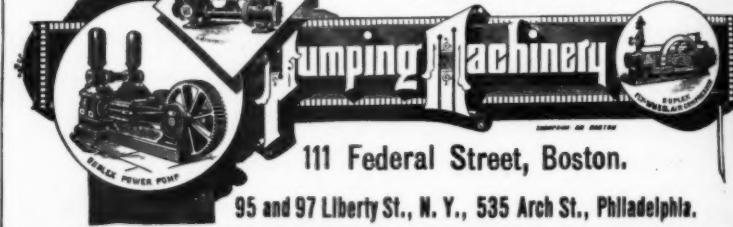
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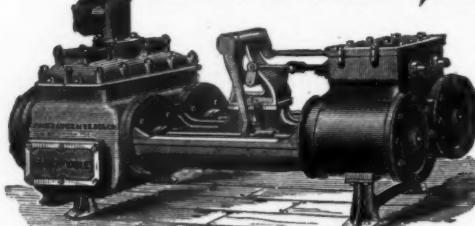
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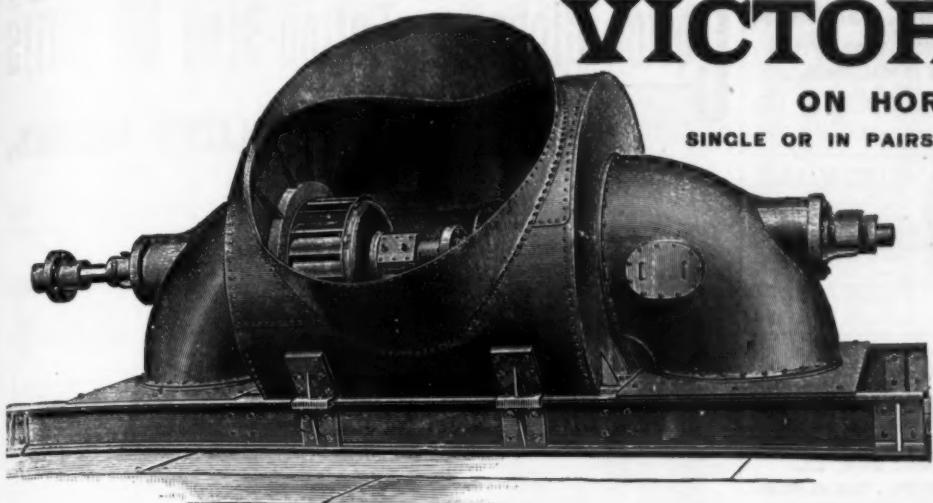
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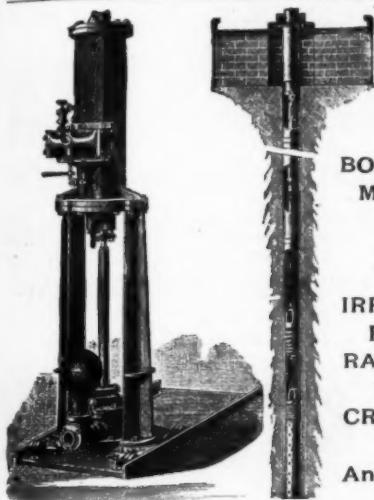
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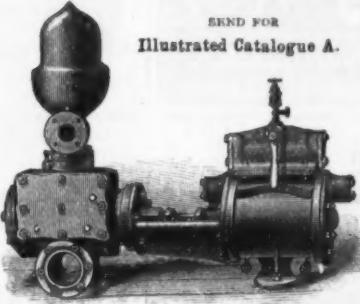
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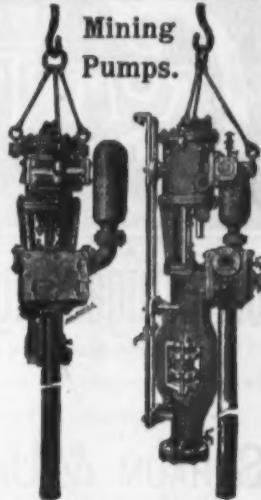
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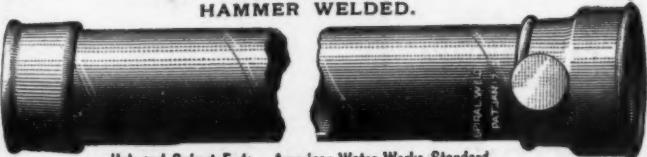
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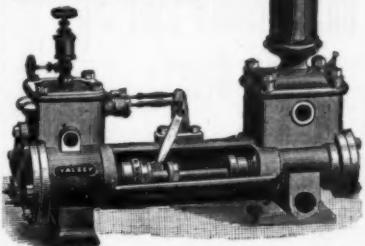
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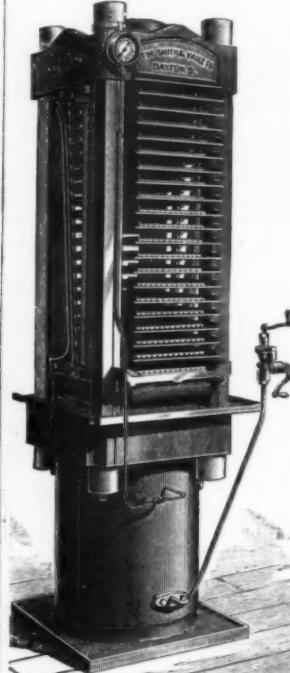
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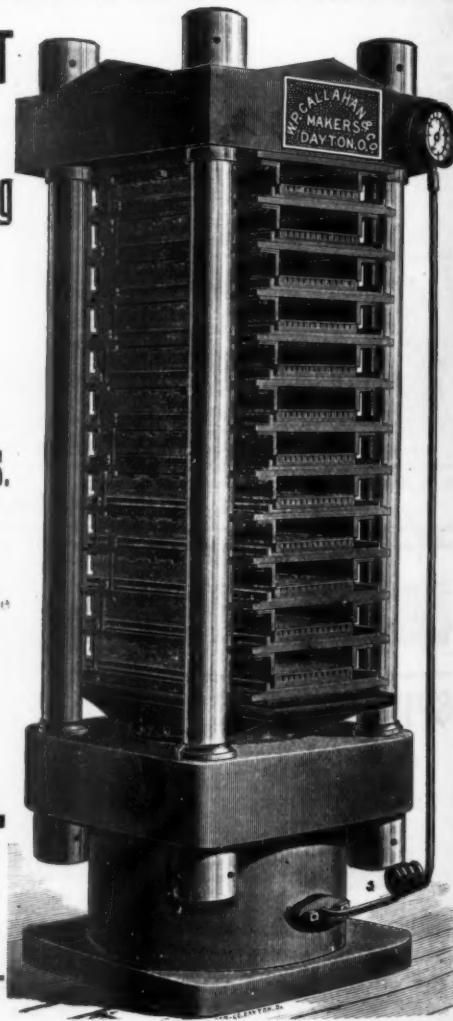
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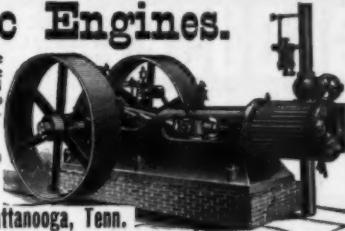


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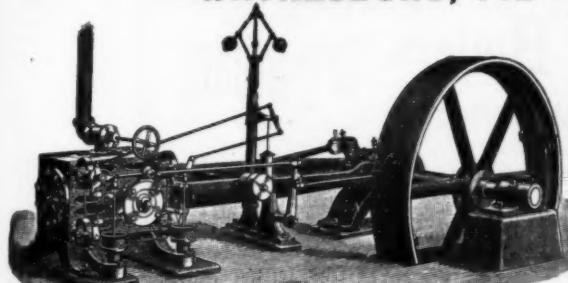
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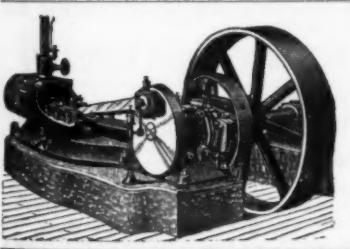
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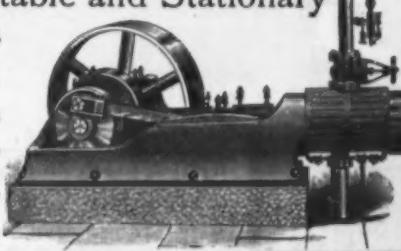
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No dust, ashes, or smoke. No Skilled Engineer required. "Brake" Test shows that 3½ gals. fuel will deliver a full H. P. on belt for 20 hours, in the case of our 1 H. P. Engine and Boiler.

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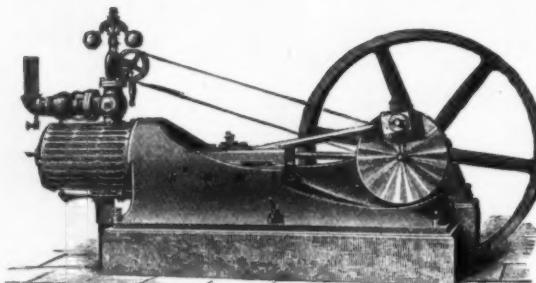
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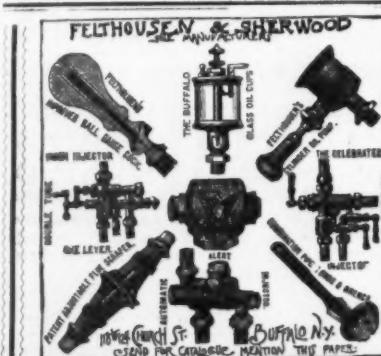
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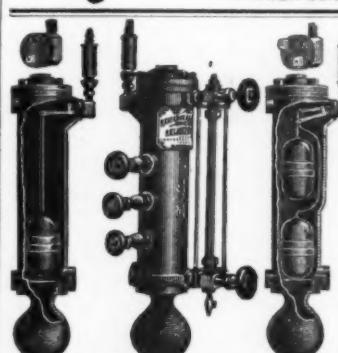


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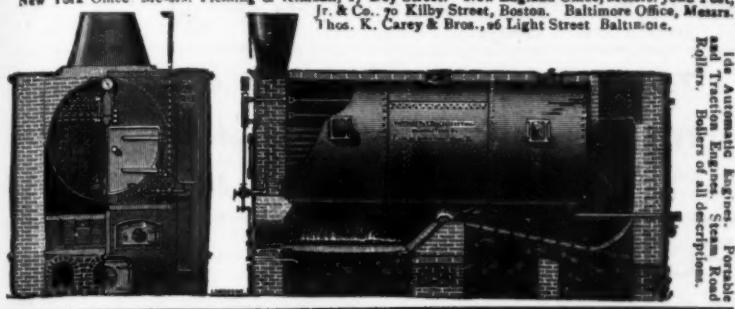
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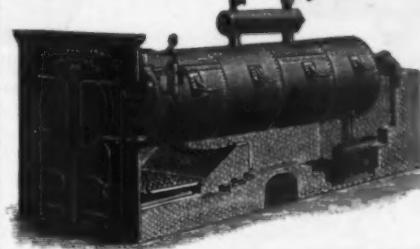
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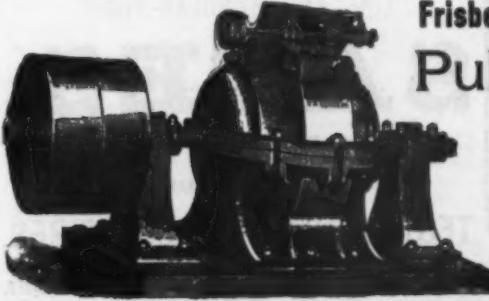
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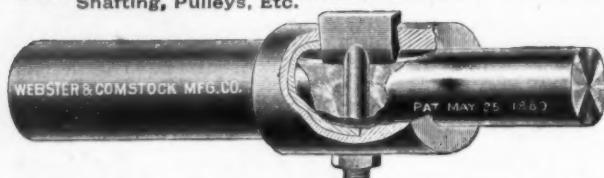
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SPIRAL STEEL CONVEYOR.

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Organized for the especial purpose of negotiating Southern Railway Bonds and General Securities, and the building of Railroads, Water Plants and other Public Works. OFFICES: New York, 57 Broadway; Chattanooga, Tenn., Richardson Building; Louisville, Ky., 327 Fifth Street.

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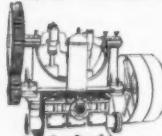
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Have for sale valuable Mineral Lands, both in Tennessee and Alabama. TOWN LOTS IN BRIDGEPORT now offered at private sale at prices which are liable to be doubled when the great public sale of May 6th occurs. Address

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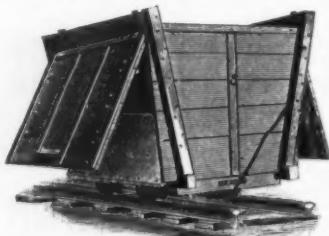


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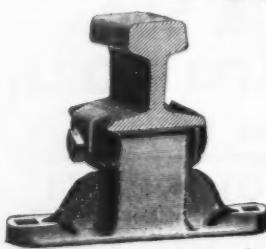
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BEST MATERIAL. LOWEST PRICES.  
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Patented January 28th, 1890.

Sample Chair and Section of Rail sent (express prepaid) to prospective purchasers. Made of cast iron or cast steel mixture and for any form of rail having a T rail form of base.

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23,000 NOW IN USE AND

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The above cut represents a very simple device for moving loaded cars up and down your side track and placing them exactly where you want them for loading and unloading. The entire Bar is steel, resting on a fulcrum of highly tempered steel, which cuts itself into the rail at every downward push of the lever, thus preventing absolutely any slipping. The tool is a gem, and is highly recommended to all Lumber Mill Men, Iron Works, Furnaces, Warehouses, Coal Miners and Dealers, Railroad Officials, and other parties who have to move empty or loaded cars without the use of a switch engine. To all responsible parties I will send one or two Bars on a week's trial, to be returned if not proving satisfactory. I will be glad to hear from you at once. Respectfully,

J. W. HARRIS, Southern Agent,  
705 Glen Addie Street, ANNISTON, ALA.

Price \$5.00 each F. O. B. Anniston. Special Prices to Dealers and Railroad Companies.

LEWIS J. MILLER,  
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MILLER & BIERCE,

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Lewis Miller's Improved Steam and Hydraulic Cotton Compress,  
(Lewis Miller's and John F. Taylor's Patents.)

The most powerful, economical, and the fastest working Compress built. The only Compress in the world that will load cars and vessels to their full tonnage.

Also Agents and Manufacturers of Steam Engines, Water Engines, Pumps, Boilers, and Heavy Machinery in General.

OFFICES:

**Southern Timber Lands**

[Spec. corresp'dence MANUFACTURERS' RECORD.]

COLUMBIA, S. C., March 9, 1890.

In view of the recent very great activity in Southern timber lands and especially in the timber lands of this portion of the South, it may be of interest for you to have a letter from this point.

The wonderful progress of the industrial South has been the theme of many a newspaper and magazine article in the past two years. But those that have not been to see can have but an imperfect idea at best of the vast quantity of money now pouring into this section from the Northern and Western States of the Union and from Europe. Of the many millions put into Southern property and enterprises none have been more remunerative than the money invested in timber lands. The reason for this is plain. The Southern boom began with the excitement over coal and iron properties. Men drawn South by this were soon attracted by the wonderful forest growths, and those that were shrewd enough invested largely. The lands not then participating in the boom were bought for a song. Now that their worth is universally appreciated the original buyers are rich. Lands that only a few months ago could be bought for \$1 and less per acre can now be sold for \$2 and \$2.50. By the autumn of 1890 they will command double as much.

Why put money into U. S. bonds bearing 4 per cent. interest, into railroad bonds and stocks liable to fluctuate in value at the whim of those that manipulate Wall street, when you can double, triple, quadruple your principal by a judicious investment in the timber lands of the South—lands that are appreciating in value every day and that, in the nature of things, must continue to do so?

Look at a few of the reasons why these lands have become such favorites with investors—why they, at no distant day, will be cheap at \$20, \$30 and \$40 an acre. 1. The timber of the North and Northwest is rapidly disappearing, and to keep up their supply now the lumbermen are going farther and farther from the industrial centers, and are cutting smaller and smaller trees.

2. Timber lands in the South are still cheap, while those in the Northwest are not. The lumberman in Michigan, rather than break up his home and move his business a thousand miles to the Southward, has heretofore contented himself with the smaller profit. But it has passed that point now. Look how one man and then another is putting his money in Southern trees—some of them merely to hold for the rise, others to ship the lumber at once.

3. These lands are all valuable *per se*. In the mountain regions there are hidden beneath many of these primeval forests deposits of iron, coal and other minerals. The river "bottoms," now covered with a perfect army of forest giants, when cleared, are the finest farming lands in the world. Take some of the South Carolina rivers for example. For miles along their valleys are thousands of acres studded with trees, many of them five feet and upwards in diameter, which can be had for almost nothing. But with the trees once off, the land under cultivation in corn, cotton, rice and grasses brings \$20 to \$30 per acre. Many of these lands lie upon navigable rivers, and both their lumber and farm products have unbroken water connection with New York and other cities of the eastern coast. With all these manifold and striking advantages, there is no wonder that Northwestern lumbermen are protecting themselves by becoming Southerners. Let them continue to come; the more the merrier. They will enjoy the climate and fall in love with the trees.

I. L. WITHERS.

THE Houston & Texas Central Railroad Co. (office, Houston, Texas) will, it is stated, purchase 300 box cars.

**Railroad Construction**

Asheville, N. C.—Railroad.—G. W. Payne and Mr. McBee have contract for constructing a 3-mile railroad from the Western North Carolina Railroad to the estate of George W. Vanderbilt, referred to some time ago.

Athens, Tenn.—Railroad.—The charter of the Cincinnati & Atlanta Railroad Co. has been filed. The company contemplates constructing a railroad from some point on the Knoxville Southern Railroad, in McMinn county, to a junction with the Cincinnati Southern Railroad near Caney Fork, in Roane county. J. J. Ivins, W. T. Lane, T. McElwee and W. S. Gaston, of Athens; J. P. Tarnot, F. D. Owings and W. E. McElwee, of Roane county, and others are the incorporators.

Atlanta, Texas—Railroad.—Funds sufficient to construct a railroad to the Red river are reported to have been secured. It is said that the railroad will be completed within a year from the signing of contract.

Atlanta, Ga.—Railroad.—J. V. Sage, general manager Georgia Pacific Railway Co. (office, Birmingham, Ala.), states that the report referred to last week that the company contemplates double-tracking its line to Birmingham, is incorrect.

Barnesville, Ga.—Railroad.—It is reported that a railroad to Yatesville will be constructed at once.

Bridgeport, Texas—Railroad.—Work will soon be commenced on the Bridgeport & Decatur Railroad, lately mentioned.

Charleston, S. C.—Electrical Railroad.—The Enterprise Railroad Co. is discussing the adoption of electric traction.

Charleston, S. C.—Belt Railroad.—The Niell McDonald Co., of New York, N. Y., is reported to have purchased the property of the Union Cotton Compress & Wharf Co., and intends constructing the belt railroad referred to lately.

Charlottesville, Va.—Belt Railroad.—It is reported that a 4-mile belt railroad will be constructed.

Clarksville, Tenn.—Railroad.—Surveys have been commenced on the proposed route for the branch, previously reported, of the Louisville & Nashville Railroad Co. (office, Louisville, Ky.)

Corsicana, Texas—Charles H. Allyn, James Garrity and others are interested in the proposed railroad to Fairfield, lately mentioned. A company will probably be organized.

Danville, Va.—Railroad.—Surveys are said to have been commenced on a new railroad to Gassonia, N. C., to be constructed by the Richmond & Danville Railroad Co. (office, Richmond).

Davis City, W. Va.—Logging Railroad.—The Blackwater Boom & Lumber Co. is constructing a 7-mile logging railroad.

Dawson, Ga.—Railroad.—The Florida, Dawson & Northern Railroad Co. has been organized with R. L. Bennett, president; B. H. Hood, secretary and treasurer, and F. A. Ruggles, general manager. The company contemplates constructing a railroad to Tallahassee, Fla., about 80 miles distant, and possibly 20 miles further to Newport, Fla., on the Gulf of Mexico.

Denison, Texas—Electrical Railroad.—The Sherman & Denison Electric Railway Co. states that it will commence the construction of its 6-mile electrical railroad to Sherman in about 60 days.

Denison, Texas—Railroad.—The Sherman, Denison & Dallas Railroad Co. has been organized with a capital of \$100,000 for the purpose of constructing a railroad to Dallas via Sherman.

Frankfort, Ky.—Bills have been introduced into the legislature to incorporate the Cincinnati, Covington & Rosedale Railway Co.; to incorporate the Waco & Richmond Railroad Co.; to authorize Fayette county to subscribe to the stock of the Kentucky Union Railway Co., and issue bonds in payment thereof; to incorporate the Altamont & Manchester Railroad Co. with a capital of \$100,000; to incorporate the Hartford & Fordville Railroad Co.; to incorporate the Louisville, Covington & Cincinnati Railroad Co.; to incorporate the Pineview, Mt. Pleasant & Big Stone Gap Railroad Co.

Franklin, Tenn.—Railroad.—Work has commenced on the railroad of the Franklin & Nashville Rapid Transit Co., mentioned last week, to extend to Nashville.

Gainesville, Texas—Street Railroad.—It is said that the Gainesville Street Railway Co. will extend its road 4 miles and purchase additional equipment. It is also reported that \$100,000 of bonds will be issued when improvements are completed.

Gainesville, Texas—Electrical Railroad.—The Fort Worth Loan & Construction Co., of Fort Worth, contemplates constructing an electrical street railroad to cost \$75,000.

Galveston, Texas—Electrical Railroad.—The Galveston Land & Improvement Co. is considering the construction of an electrical railroad.

Hendersonville, N. C.—Street Railroad.—S. V. Pickens confirms the report of last week that he and others will construct a street railroad one mile in length.

Huntsville, Ala.—Railroad.—It is rumored that the Nashville, Chattanooga & St. Louis Railroad Co. (office, Nashville, Tenn.) will extend its line to Queonto, on the Birmingham Mineral Railroad, a distance of about 55 miles.

Lexington, Ky.—Railroad.—The city has extended the time required for the completion of the Kentucky Union Railway to Breathitt county, in order to secure the subscription of \$150,000, from April 21 to June 21.

Lexington, Va.—Street Railroad.—Negotiations are pending for the construction of a street railroad at Glasgow.

Lowndesville, S. C.—Railroad.—The construction of a railroad to a connection with the Georgia, Carolina & Northern Railroad at Haskell is being talked of.

Macon, Ga.—Railroad.—The construction of a railroad to Elberton is being talked of. The proposed route is from Macon to Haddock's Station on the tracks of the Georgia Railroad & Banking Co., from which place a railroad will be constructed to White Plains via Eatonton, 45 miles distant. The tracks of the Union Point & White Plains Railroad will be used from White Plains to Union Point, and from Union Point a road is to be constructed to Elberton, a distance of 35 miles. R. T. Martin & Co. can give information.

Manchester, Va.—Street Railroad.—Bowen & Bradley have contract for furnishing ties for the street railroad previously reported to be constructed by the Southside Land & Improvement Co. Construction will commence shortly.

Mebane, N. C.—Railroad.—The Danville, Mebane & Pittsboro Railroad Co. states that it is tends commencing the construction of its road, lately mentioned, in September or October, 1890.

Melrose, Fla.—Railroad.—The Georgia Southern & Florida Railroad Co. (office, Macon, Ga.) states that it does not contemplate the construction of a branch road, lately rumored, to a connection with the Tampa, Tallahassee & Western Railroad.

Montvale, Tenn.—Railroad.—The construction of a railroad, previously referred to, to extend to Maryville, is being re-agitated. J. P. Blankenship, secretary Board of Enterprise, can give information.

Newcomb, Tenn.—Railroad.—S. L. Wooldridge, of Lexington, Ky., and Russell A. Clapp are constructing the railroad, lately mentioned, to extend to Jellico.

New Orleans, La.—Belt Railroad.—The New Orleans Elevated Railway Co., previously mentioned, has offered to construct and operate a belt railroad for the term of 50 years, and to erect a union depot also.

Norfolk, Va.—Railroad Bridge.—The Norfolk Southern Railroad Co. will receive proposals until April 10 for the construction of 3 counterbalance pivot drawbridges, one with 60 and 30 feet arms and the others with 50 and 25 feet arms.

Pulaski City, Va.—Dummy Railroad.—The Pulaski Street Railway Co., lately mentioned, will, it is said, construct dummy railroad at once.

Raleigh, N. C.—Railroad.—Right of way is reported as being secured by the Wilmington & Weldon Railway Co. (office, Wilmington) for a railroad to extend to Springhope, about 35 miles distant.

Richmond, Ky.—Electrical Railroad.—The Richmond Street Railway Co., previously mentioned, is considering the cost of adopting electricity as a motive power. C. D. Chenault can give information.

Richmond, Va.—Street Railroad.—The Richmond City Railway Co. is reported as having purchased the Marshall street line of the Manchester Railway & Improvement Co.

Richmond, Va.—Street Railroad.—The River View Railway Co., previously reported as incorporated, states that construction on its street railroad will commence at once and be completed in four months. R. B. Chaffin, president, can give information.

Rockwood, Tenn.—Dummy Railroad.—Contract is said to have been let for the construction of a dummy railroad to Cardiff, 4 miles distant.

Savannah, Ga.—The Southern Land & Investment Co., mentioned elsewhere in this issue, has privilege of constructing railroads.

Shelby, Ala.—Dummy Railroad.—A dummy railroad is projected to Columbiana.

Sulphur Springs, Tex.—Railroad.—Geo. B. Boomer, mentioned elsewhere in this issue offers, it is said, to construct the projected railroad to Cooper.

Sweetwater, Tenn.—Railroad.—Resolutions have been adopted by the citizens requesting the board of mayor and aldermen to offer \$50,000 to a trunk line railroad company if it will build a railroad through the city.

Talladega, Ala.—Railroad.—It is rumored that the Nashville, Chattanooga & St. Louis Railroad Co. (office, Nashville, Tenn.) intends purchasing the Talladega & Coosa Valley Railroad, which extends to Pell City, a distance of 26 miles.

Trenton, Ga.—Dummy Railroad.—A charter has been granted to the company previously men-

tioned for the purpose of constructing a dummy railroad from Rising Fawn via Trenton, New England City and Wildwood to the Tennessee line. Col. Capen can give information.

Washington, Ga.—The Washington Construction Co. has been chartered for the purpose of building and leasing railroads, dealing in real estate and manufacturing machinery and cars; capital stock \$500,000. C. E. Smith can give information.

Wheeler, N. C.—Railroad.—The East Tennessee & West North Carolina Railroad Co. (office, Cranberry) will, it is stated, construct a railroad to the junction of the East Tennessee, Virginia & Georgia Railway and the Charleston, Cincinnati & Chicago Railroad.

Wytheville, Va.—Street Railroad.—A street railroad is being talked of.

**Southern Financial News.****NEW BANKS.**

Arcadia, Fla.—A bank is reported as to be organized with a capital of \$100,000.

Atlanta, Ga.—The Georgia Co-operative Loan Co. has been organized with a capital stock not to exceed \$5,000,000 by J. C. Kimball, B. B. Crew, J. A. Anderson and others.

Augusta, Ga.—The Augusta Security Co. has asked to be incorporated with a capital stock of \$200,000 and privilege it to increase it to \$1,000,000. Charles H. Phinizy, C. G. Goodrich, J. L. Fleming and others are incorporators.

Baltimore, Md.—The Southern Real Estate & Trust Co., lately reported as organized, has been incorporated with Frank Brown, president.

Buena Vista, Va.—It is reported that a national bank will be established shortly.

Chattanooga, Tenn.—J. H. Burnette, Arthur Thomas, Amos Tippenpaw and others are endeavoring to organize a bank at South Chattanooga with a capital of \$50,000.

Fairfield, Texas.—The First National Bank has been organized with a capital stock of \$50,000. W. T. Watson is president.

Fort Payne, Ala.—The Southern Banking Co. has been incorporated by C. O. Godfrey, A. W. Train, T. P. Pierce and others.

Frankfort, Ky.—Bills have been introduced into the legislature to incorporate the Union Bank of Mayaville; to incorporate the Interstate Guarantee & Trust Co.; to incorporate the Peoples' Banking & Trust Co.; to incorporate the Ford Savings Bank of Ford.

Greensboro, N. C.—The Greensboro Security & Investment Co. has been organized with James E. Tate, Charles E. Tate, W. P. Bynum, Jr., and others with a capital stock of \$250,000, which may be increased to \$500,000.

Houston, Texas.—It is stated that a bank with a capital of \$500,000 will be opened.

Lexington, Ky.—The Central Bank is being organized with a capital of \$200,000 by W. F. Berry, Louis Straus, Charles Seelback and others.

Roanoke, Ala.—The bank previously reported under Roanoke, Va., should be Roanoke, Ala. B. F. Ponder, of Opelika, can give information.

Rockwood, Tenn.—The First National Bank of Cardiff has been organized with \$50,000 capital. J. F. Tarwater is president.

Shelby, Ala.—It is said that a bank will be organized with a capital of \$200,000.

Sparrow's Point, Md.—A branch of the Provident Savings Bank of Baltimore has been established.

Tredegar (P. O., Jacksonville) Ala.—The Tredegar National Bank has been organized with a capital of \$50,000.

Waxahachie, Texas.—The First National Bank has increased its capital from \$75,000 to \$100,000.

Wheeling, W. Va.—The Title Insurance & Abstract Co. has been incorporated by Morris Horheimer, C. H. Collier, William Young and others.

Buckhannon, W. Va., will hold an election to decide as to the issuance of \$20,000 of bonds to provide for street improvements.

Cleveland, Tenn., will probably hold an election for the purpose of ascertaining as to the issuance of bonds for the purpose of constructing a sewerage and water works system.

Dallas, Texas, is agitating the question of issuing \$150,000 of water-works bonds.

Fayette county, Ky., has asked for authority to subscribe to the stock of the Kentucky Union Railway Co. and issue bonds in payment thereof.

Fort Worth, Texas, has issued \$125,000 of 5 per cent. sewer bonds and also \$100,000 5 per cent. water-works bonds to run for 30 and 50 years respectively from May 1. H. S. Broiles, mayor, can give information.

Henderson, Ky., has asked for authority to issue \$450,000 of bonds to pay the present debt, amounting to \$427,000, and improve streets, sewers, etc., with the remainder.

Highland, Ala., will apply for permission to issue \$40,000 of bonds for the purpose of providing for street improvements.

J. B. White and others of the finance committee, Florence, Ala., will receive proposals until April 15 for the purchase of \$100,000 of improvement bonds lately mentioned as to be issued.

Maysville, Ky.—The Bank of Maysville has declared a special dividend of 25 per cent.

Point Pleasant, W. Va., has voted to issue \$25,000 of bonds for improvements. E. S. Snyder can give particulars.

The Big Stone Gap Improvement Co., Big Stone Gap, Va., has declared a dividend of 5 per cent.

The Expressmen's Investment Co., Dallas, Texas, has declared a dividend of \$70 per share on stock now in force.

The Gainesville Street Railway Co., Gainesville, Texas, mentioned elsewhere in this issue, will, it is reported, issue \$100,000 of bonds after contemplated improvements have been made.

The Hagerstown Hedge & Fencing Co., Hagerstown, Md., has declared a semi-annual dividend of 6 per cent.

The Phoenix Iron Co., Sheffield, Ala., mentioned elsewhere in this issue, will be authorized to issue \$1,000,000 of 6 per cent, redeemable bonds with power to increase the issue by \$500,000 additional.

The Raleigh & Gaston Railroad Co. (office, Raleigh, N. C.) has declared a dividend of 3 per cent.

Waco, Texas, has sold \$150,000 of street improvement bonds to Gaylord, Blessing & Co., of New York city, at 102.

It is stated that the Baltimore & Ohio Railroad Co. (office, Baltimore, Md.) will add to its equipment about 6,000 freight cars.

#### Richmond Stock Exchange Quotations.

Reported by JOHN L. WILLIAMS & SON, Bankers, Richmond.

RICHMOND, VA., March 25, 1890.

BID ASKED.

North Carolina 4's, 1910	96	97
North Carolina 6's, 1919	125	127
Virginia New 3's, 1922	66½	66½
Lynchburg, Va., 5's, 1915	104	..
Petersburg, Va., 5's, 1918	103½	..
Norfolk, Va., 5's, 1911	104	..
Richmond, Va., 5's, 1922	111½	..
Atlanta & Charlotte Ry., 1st 7's, 1907-121	121½	..
Atlanta & Charlotte, G'd 6's, 1900	106	..
Char., Col. & Aug. R.R., Gen. 6's, 1932-108½	109½	..
Georgia Pacific Ry., 1st 6's, 1922-112½	113	..
Georgia Pacific 2d 5's, 1923	82½	83
Ga. Pacific Incomes, 5's, .....	32	..
Petersburg Railroad Class A 5's, 1926-105	..	..
Petersburg Railroad Class B 6's, 1926-106½	107½	..
Rich. & Danville R. R., Gold 6's, 1915-116	..	..
West. N. Car., R. R., Gen. 6's, 1914	94½	96
Northwestern N. Car., R. R., 1st 6's, 103½	103½	..
Atlanta & Charlotte, R. R. Stock	91	92½
North Carolina Railroad Stock	103	..
R. F. & Pot. R. R. Div'd Obligations, 108	110	..
Virginia Midland Railway Stock	46	47½
Sloss Iron & Steel Co. Stock	63	..
Sloss Iron & Steel Co. 1st 6's	..	..
Sloss Iron & Steel Co. 2d 6's	..	..

#### Foreign Exchange Quotations.

ALEXANDER BROWN & SONS.  
BALTIMORE, March 26, 1890.

Sterling—Selling.	Commercial.
60 days.... 484	482 @ 482½
3 days.... 487	..
Francs—Selling.	Commercial.
60 days.... 520	523½ @ 523½
3 days.... 518½	..
Reichmarks—Selling.	Commercial.
60 days.... 95	60 days.... 94
3 days.... 95½	3 days.... 94½
Guilders—Selling.	Commercial.
60 days.... 40½	60 days.... 39½
3 days.... 40½	3 days.... 39½

#### Baltimore Stock Exchange Quotations.

Reported by ALEXANDER BROWN & SONS, Bankers, Baltimore.

BALTIMORE, March 26, 1890.

BID ASKED.

Virginia 3-4's 10-40's	35	..
Virginia 3's, new	69½	66½
N. Carolina 4's	97	..
Norfolk Water 8's, C.	135	..
Ga. Car. & N. 5's	103	..
Va. & Tenn. 8's	125	130
Wil. & W. 5's	112½	..
Wil. Col. & Aug. 6's	119½	121
Atlanta & Char. 1st, 7's	121	121½
Atlanta & Char. income 6's	105½	106½
Col. & Green. 1st, 6's	106½	..
Col. & Green. ad, 6's	84½	85
Va. Midland, ad, 6's	114	..
Va. Midland, 3d 5-6	108½	..
Char., C. & Aug. 2d, 6's	120½	..
West Va. Central 1st, 6's	108	..
Ga. Pacific 1st, 6's	112½	..
Ga. Pacific ad	82½	82½
West Nor. Car. Cons'd 6's	94½	..
Cape Fear & Y. Valley 6's, A.	103	104
Cape Fear & Y. Valley 6's, B.	101½	102½
Cape Fear & Y. Valley 6's, C.	101½	102

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\*Means machinery is wanted, particulars of which will be found in "Machinery Wanted" columns.

In correspondence relating to matters reported in this paper, it will be a favor if it is stated that the information was gained from the MANUFACTURERS' RECORD.

#### ALABAMA.

Aniston—Oil Mill and Fertilizer Factory.—Messrs. Smith & McLaughlin, of Memphis, Tenn., and C. C. Huckabee will, it is stated, probably erect a large cotton-seed oil mill and fertilizer factory.

Aniston—Water Works.—McDonald & Campbell have received contract for constructing a reservoir at Corning for the water works previously reported.

Atala—Iron Furnace.—The Iron City Coal, Land & Improvement Co., recently reported as organized with a capital stock of \$300,000, has increased the same to \$500,000, and, it is stated, let contract for a 100-ton coke iron furnace. It controls 20,000 acres of coal land, besides its city property. J. H. Choat, of Kansas, is general manager.

Bessemer—Lumber Mill.—The Steel City Lumber Co. has been organized, and started a lumber mill.

Bessemer—Brick Works.—The Peerless Brick & Construction Co. is erecting brick works.

Bessemer—Factory.—R. S. Fletcher, of Washington, D. C., and Samuel Mullen will, it is reported, form a company to manufacture Americana, a new explosive.

Bessemer—Brick Yard.—J. H. Hard and others will, it is reported, start a brick yard.

Birmingham—Bridge and Bolt Works.—R. H. Towers, of the Towers Hardware Co., has purchased the plant of the Birmingham Bridge & Bolt Works, and expects to put in some new machinery to increase output.

Birmingham—Bridge.—W. B. Kline has been awarded contract for the stone work of the 21st street bridge, mentioned last week, at \$14,965.65.

Calera—Factories.—The Calera Land Co., mentioned last week, has issued \$150,000 of bonds to improve its property, and offer inducements for the location of factories.

Camden—Gin and Shingle Mill.—J. R. Liddell & Co. have erected a cotton gin and shingle mill.

Florence—Sewerage System.—Plans and specifications are nearly completed for the sewerage system previously reported, and bids for construction will soon be invited. Wade Allen can give particulars.

Demopolis Cotton Compress.—It is reported that a cotton compress will be built.

Eufaula—Sash and Door Factory, etc. - Ross & Co. will put in sash and door machinery, planer, resaw, turning lathe and mortiser, and power or trip hammer.

Florence—Brick Yard.—H. C. Nichols, of Philadelphia, Pa., and De Louis Tice, of New York city, will, it is reported, start a brick-yard with a capacity of 30,000 brick per day.

Florence—Water Works.—The city has contracted with Jeter & Boardman, of Macon, Ga., for the extension of water works at a cost of \$30,000.

Florence—Gas Works.—Tatum & Butterworth have received franchise to build gas works to cost \$30,000.

Florence—Sewerage System.—J. B. White will receive bids until April 5th for the construction of the sewerage system lately mentioned.

Fort Payne—Car Works, etc.—The building of car works, a wagon factory and a steam laundry is projected. The Fort Payne Coal & Iron Co. can give information when anything is done.

Gadsden—Publishing.—The Gadsden Publishing Co. has been incorporated with W. H. Denison, president; F. S. Mordaunt, general manager, and J. C. Pugh, secretary, to publish the Gadsden Leader.

Highland—Street Improvements.—The town will petition the legislature to authorize the issuance of \$40,000 of bonds for street improvements.

Mentone—Coal and Silver Mines.—E. Mason has organized the Mentone Mining Co., lately mentioned to develop coal and silver lands.

Mobile—Electric-light Plant.—The Progress Electric Lighting Co. has added a 125 horse-power engine.

Montgomery—Knitting Factory.—It is reported that a \$50,000 company has been organized to establish a knitting factory.

Montgomery—Excelsior Factory.—C. H. Cord has erected an excelsior factory.

Montgomery—Barrel and Stave Works, etc.—The Montgomery Barrel & Stave Works will, it is reported, be enlarged, and spoke and handle machinery put in.

Montgomery—Implement Works, &c.—The erection of a paint factory, clothing factory and agricultural implement works is projected.

Montgomery—Electric-light Plant.—H. T. Beggs and others have petitioned the city for permission to erect the electric-light plant mentioned last week.

Opelika—Ice Factory.—The Opelika Ice manufacturing Co. is to be organized by N. P. Renfro and others with a capital stock of \$10,000.

Oxanna—Car Works.—The establishment of car works is again talked of.

Pell City—Land. E. W. Godfrey and Mr. Taylor; of Fort Payne, T. A. Frierson, of Chattanooga, Tenn., and others have, it is reported, formed a \$1,000,000 company, purchased 5,000 town lots, and will improve same.

Selma—Excelsior Factory.—Wise & Co., lately reported as to start a spoke and handle factory, will probably add machinery for the manufacture of excelsior.\*

Sheffield—The Phoenix Iron Co. is being organized by the Alabama Development Co. and the Birmingham, Sheffield & Tennessee River Railroad Co. to purchase the property of the Sheffield & Birmingham Coal, Iron & Railway Co.

Shelby—Iron Furnace.—The Alabama Coal & Iron Co. will, it is reported, erect a 150-ton coke furnace.

Shelby—The Shelby City Land Co. is to be organized.

Shelby—Water Works.—Plans are being prepared for the water works lately mentioned. The Shelby Iron Co. can probably give particulars.

Sweeny—Coal and Iron Mines.—It is reported that the Gunters Mountain Iron, Coal & Railway Co. has been organized by S. P. Dodson, of Chattanooga, Tenn., and others, purchased 20,000 acres of coal, iron and manganese lands, and will develop. The capital stock is said to be \$10,000.

Sylacauga—Iron Furnace.—S. E. & J. W. Noble, D. T. Parker and J. R. Roberts are the incorporators of the Marble City Land & Furnace Co., reported last week as to erect an iron furnace. The capital stock is \$1,000,000.

Sylacauga—Cotton Gin.—It is reported that the Howell Cotton Co. will erect a cotton gin.

Sylacauga—Cotton Mill.—The building of a cotton mill is probable. The Marble City Land & Furnace Co. can give information if anything is done.

Sylacauga—Pump Works.—The Marble City Pump Works has been organized. The Marble City Land & Furnace Co. can give particulars.

Sylacauga—Glass Works.—Negotiations are being made, it is stated, with a St. Louis (Mo.) firm, for the location of glass works in Sylacauga.

Sylacauga—Water Works.—It is reported that water works will be constructed at once. The mayor can give information.

Talladega—Iron Furnace and Steel Works.—The Talladega Iron & Steel Co., will, it is rumored, erect steel works.

Talladega—Iron Furnace.—The Pennsylvania Iron & Steel Co., mentioned in last issue, has, it is reported, purchased iron ore lands and a site for its iron furnace, mentioned in last issue.

Tredegar (P. O. Jacksonville) Iron Furnace.—Negotiations are reported advanced for the establishment of a sixty ton charcoal furnace to run on car-wheel iron. G. B. West, general manager, Jacksonville, can probably give information.

Tredegar (P. O. Jacksonville) Ice Factory, etc.—An ice manufacturing and cold-storage company is being organized.

Tredegar (P. O. Jacksonville) Iron Furnace.—It is reported that negotiations are pending for the removal of a 50-ton coke iron furnace from another point to Tredegar. G. B. West, general manager can give particulars, if true.

Tredegar (P. O. Jacksonville) Tannery.—There are rumors of a new tannery to be built by an Ohio party.

Troy—Cotton Compress.—It is reported that a cotton compress will be erected.

Troy—Car Shops.—The Alabama Midland Railroad Co. (office Montgomery) will, it is reported, erect car shops in Troy.

Tuscaloosa—Coke Ovens.—The Standard Coal Co. is reported as building 200 coke ovens at its mines.

#### ARKANSAS.

Dardanelle—Electric-light Plant.—The Dardanelle Ice Co., lately mentioned, contemplates putting in an incandescent electric-light plant.

Dardanelle—Oil Mill.—A stock company has been organized to erect the cotton-seed oil mill lately mentioned. The Dardanelle Ice Co. can give particulars.

Harrison—Flour, Saw and Planing Mills, etc.—Ryan Bros. & Co. are erecting a three story building, 120x130 feet, for the saw and planing mill lately mentioned, and will also put in flour mill, cotton gin, carding, and sash and door machinery.\*

Lester—Saw Mill.—The Lester Lumber Co. has, it is stated, purchased the saw mill of C. D. Gee & Co.

Marianna—Saw and Planing Mill.—It is reported that a new saw and planing mill has been erected by the L'Anguille Lumber Co.

Marked Tree—Lumber Mill.—C. H. Garrett has added new machinery to his lumber mill.

Marked Tree—Saw Mill.—Oliver Davis is reported as erecting a saw mill.

Newton County—Zinc Mines.—It is reported that St. Louis (Mo.) parties have purchased the Chimney Rock zinc mines.

Van Buren—Tobacco Factory.—The Knights of Labor are organizing a stock company to establish the tobacco factory lately mentioned. H. H. Dill, secretary, can give particulars.\*

#### FLORIDA.

Apalachicola—Sash, Door and Blind Factory.—Thomas McGlynn will add machinery, it is stated, for the manufacture of sash, doors and blinds, and will also manufacture furniture.

Branford—Quarry.—G. W. Clark, of the Jacksonville Marble Co. has purchased the stone quarry recently discovered by him near Branford, and will develop.

Callahan—Saw and Planing Mill.—J. J. Upchurch and B. G. Dyall have purchased, it is reported, the Upton Saw and planing mill near Callahan.

Carrabelle—Land.—It is reported that a Scotch syndicate is negotiating for the purchase of the Curtis lands on James Island, near Carrabelle.

Crawfordville—Phosphate Lands, etc.—The Wakulla Phosphate Co. has been incorporated with Wm. McCabe, president; R. W. Ashmore, vice-president; W. W. Walker, treasurer, and N. R. Walker, secretary, to develop phosphate and other mineral lands in Wakulla and other counties.

Dunnellon—Phosphate Land.—The Withlacoochee River Phosphate Co. has purchased, it is reported, 345 acres of phosphate land at Dunnellon for \$26,000.

Florida—Phosphate Lands.—Dr. G. H. Gwynn has purchased, it is reported, several tracts of newly-discovered phosphate land in Lafayette and Suwanee counties, and will probably develop.

Gainesville—Phosphate Mines.—James M. Graham, mentioned in last issue, will organize a stock company to develop his phosphate lands, if he does not sell same.

Jacksonville—Cigar Factory.—H. M. Fritot will probably rebuild at once his cigar factory, reported in this issue as burned.

Jasper—Water Works.—A proposition is being considered, it is stated, for the construction of water works.

Melrose—Moss Factory and Rice Mill.—H. A. Blake will rebuild his moss factory and rice mill, recently burned.

Milton—Canning Factory.—Efforts are being made to organize a stock company to establish a canning factory.

Tallahassee—Machine Shops.—The Eureka Machine Works is reported as to build machine shops.

Tallahassee—Planing Mill.—G. E. White will, it is reported, erect a planing mill.

Tavares—Handle Factory.—Earman & Streets, lately mentioned as to start a box factory, write that they manufacture orange box sides, and only contemplate putting in machinery for making axe handles.\*

Zolfo—Phosphate Mines.—The George W. Scott Co. is developing phosphate mines.

#### GEORGIA.

Abbeville—Variety Works.—The establishment of variety works is proposed.

Abbeville—Brick-yard.—The brick-yard lately mentioned (under Americus) as to be established on the Ocmulgee river by the Ocmulgee Brick Co., will be located in Abbeville.

Acorn—Oil Mill.—The building of a cotton-seed oil mill is projected.

Adairsville—Oil Mill and Fertilizer Factory.—The erection of a cotton-seed oil mill and fertilizer factory is projected.

Albany—Oil Mill.—Another cotton-seed oil mill will be erected this summer. B. F. Brimberry can give particulars.\*

Albany—Flour Mill and Elevator.—W. H. Culpeper & Co. are erecting the flour mill and elevator mentioned in last issue.

Albany—Lumber Mill.—It is reported that the Kaufman Lumber Co., of Poulan, will probably remove its plant to Albany.

Americus—Spoke and Hub Factory, etc.—Lawson Stapleton expects to start the manufacture of spokes, hubs, helveles and hames.\*

Arlington—Fertilizer Factory.—A fertilizer factory will probably be erected.

Atlanta—Car Works.—The Atlanta Car Co. has purchased 22 acres of land as a site for its car works, lately mentioned.

Atlanta—Electrical Signal Systems.—The city will probably establish a system of electrical police signals. The mayor can give information.

Atlanta—Land.—It is reported that the Southern cotton mills has purchased 266 acres of land from F. C. and A. M. Foster for \$100,000.

Atlanta.—The Central Real Estate Co. has been organized with Patrick Calhoun, president, and W. A. Hemphill, secretary. The capital stock is \$100,000.

Atlanta—Land.—W. H. Patterson, R. H. Wilson, A. F. Simril and others have incorporated the McPherson Park Co. to deal in real estate. The capital stock is \$31,000.

Augusta—Brewery.—The Augusta Brewing Co. has put in a malt mill; will put in new ice machinery and increase capacity.

Augusta—Cotton Factory.—The Richmond Cotton Factory has been enlarged.

Augusta—Publishing.—Frank Hammond, of Greenville, S. C., W. H. Cozart, W. C. Boykin and others have chartered the South Atlantic Co. to publish the "South Atlantic."

Bainbridge—Ice Factory.—G. G. Woodhull will, it is reported, start an ice factory.

Barnesville—Knitting Factory.—J. A. Blalock will start a knitting factory.

Boston—Oil Mill and Fertilizer Factory.—J. M. Rushin writes that the Farmers' Alliance is awaiting the action of Congress on the bill touching the cotton-seed oil business, before building the cotton-seed oil mill and fertilizer factory previously mentioned.

Brunswick—Car-heater Factory.—C. W. Wecking, Jr., will make efforts to organize a company to manufacture his patent car-heater mentioned in last issue.

Brunswick—Phosphate Mines.—It is reported that a \$100,000 stock company will probably be formed to develop phosphate lands.

Brunswick—Electric-light Plant, etc.—The Brunswick Light & Water Co. has not definitely decided on enlarging its works, mentioned in last issue.

Brunswick—Electric-light Plant.—The Brunswick Brewing & Ice Co. will put in an electric-light plant.

Brunswick Medicine Factory.—C. W. Wecking & Son will start a medicine factory.

Cartersville—Canning and Pickling Factory.—Jones & Miller have enlarged their bottling works, mentioned in last issue, and will add a canning and pickling factory.\*

Dahlonega—Saw Mill.—F. W. Hall is erecting the saw mill lately mentioned.

Dalton—Oil Mill.—John Chester will probably form a company to erect a cotton-seed oil mill.

Dalton—Iron Mines.—E. W. Marsh & Sons, of Atlanta, and Joseph F. Allison, of Cartersville, lately reported, purchased 1,400 acres of iron ore lands at Oredell and will develop. They expect to put out from 200 to 300 tons per day.\*

Dalton—Marble Quarries.—The Dalton Marble Co. is the name of the company lately mentioned as organized with J. W. Barrett, president, to develop marble quarries.

Dalton—Cotton Mill.—It is stated that the Crown Cotton Mills Co. will probably double its capital stock and enlarge its mill.

Dawson Candy Factory.—A candy factory has, it is reported, been started.

Dawsonville.—It is reported that a land company will be organized.

Dublin—Brick-yard.—It is reported that the Dublin Brick Co. will put in new machinery.

## MANUFACTURERS' RECORD.

Douglasville—Water Power.—T. R. Whitley will probably develop a water power to operate the electric-light plant recently reported.

Forsyth—Cotton Factory.—It is reported that another cotton factory will be erected.

Fort Valley—Fertilizer Factory.—The Fort Valley Investment & Improvement Co., mentioned in last issue, contemplates erecting a fertilizer factory, and if it decides on so doing, will increase capital stock.

Fort Valley—Oil Mill and Fertilizer Factory.—The Farmers' Alliance contemplate organizing a \$10,000 stock company to erect a cotton seed oil mill and fertilizer factory.

Georgia—Aluminum Plant.—Mitchell Renz, of 113 F. street, N. W., Washington, D. C., will probably locate a plant at some point in Georgia for the manufacture of Aluminum.

Girard—Trunk Factory.—Frank Staggs has erected a two-story trunk factory.

Griffin—Canning Factory.—W. H. Hartnett will move his canning factory to Griffin and enlarge as lately stated.

Leary—Oil Mill and Fertilizer Factory.—The Leary Co-operative Cotton-seed Oil Mill & Fertilizer Co. is to be organized to erect the cottonseed oil mill and fertilizer factory lately mentioned.\*

Lithonia Bagging Factory, Oil Mill, etc.—The Farmers' Alliance, previously reported (under Decatur) as investigating with a view to erecting a cotton seed oil mill, bagging, fertilizer and agricultural implement factories, has incorporated the DeKalb County Co-operative Manufacturing Co., with the privilege of operating same. It will probably erect bagging factory now and oil mill next fall.\*

Macon—Distillery. C. E. Smith, of Newnan, is erecting a distillery.

Macon—Knitting Factory.—The Bibb Manufacturing Co., previously mentioned as ordering additional knitting machines, will, it is reported, erect a new factory to cost \$100,000.

Macon Canning Factory.—E. D. Huguenin contemplates starting a canning factory.\*

Mandeville—Saw Mill.—Robert Parker has erected a saw mill.

Marietta—Ice Factory.—An ice factory will probably be erected.

Marietta—Cotton Factory.—A party has made a proposition to erect a cotton factory if the citizens will raise \$35,000.

Marshallville—Ginnery.—J. O. Farror is reported as having erected building for a cotton ginnery.

Marshallville—Canning Factory, etc.—A \$20,000 improvement company has been organized and will endeavor to secure the erection of a canning and spoke and hub factories.

Montezuma—Variety Works, &c.—The Montezuma Investment Co., lately mentioned as to start variety works, will, it is reported, move the Butler variety works to Montezuma, and also start brick works.

Richland—Fertilizer Factory.—The Americus Investment Co. states that the erection of the fertilizer factory, mentioned in last issue, is assured.

Savannah—The Southern Land & Investment Co. has been incorporated by J. K. Garnett, J. B. Floyd, Emile Newman and others, to deal in real estate. The capital stock is \$15,000.

Savannah.—The capital stock of the Coast Land Co., mentioned in last issue, is \$40,000, with \$15,000 paid in.

Talbotton—Publishing.—J. W. Hall, S. B. Baldwin and S. Z. Webster have incorporated the West Georgia News Publishing Co. to publish a newspaper.

Tallapoosa—Blacking Factory.—Wise & Aris, of Fort Payne, Ala., will, it is reported, move their blacking factory to Tallapoosa.

Tallapoosa—Machine Shops.—The Georgia, Tennessee & Illinois Railroad Co. will, it is reported, locate its machine shops in Tallapoosa.

Trenton—Publishing, &c.—The Record Printing Co. has been incorporated by F. W. Stiles, W. H. H. Search, G. A. Brown and others. The capital stock is \$15,000.

Waycross—Machine Shops.—The Waycross Iron Foundry, J. H. Gillon, proprietor, will add machine shops.

Waynesboro—Planing and Grist Mill.—It is reported that a stock company will probably be formed to erect grist and planing mill.

West End—Paving.—Bids will be received by Forrest Adair until April 7th for the paving of Gordon street.

Whitesburg—Saw Mill.—J. Jones contemplates enlarging his saw mill.

Wrightsville Brick Works.—It is reported that the Wrightsville Brick Co. has been organized, and will start brick works.

## KENTUCKY.

Ashland—Land.—It is reported that the syndicate lately mentioned as to build a steel plant has purchased 200 acres of land for \$100,000. John Russell can give information.

Barbourville—The Barbourville Real Estate Co. has been organized.

Barbourville—Iron Furnace, &c.—It is reported that an iron furnace, coke ovens and several woodworking factories will be built. The Barbourville Land & Improvement Co. can probably give information.

Burkville—Saw Mill.—Williams & Ritchey, lately mentioned as having erected a flour mill, have also erected a saw mill.

Covington—Cotton Factory.—It is stated that a company has been organized by H. D. Peck and others to build the cotton factory lately mentioned.

Cloverport—Barrel Factory.—A barrel factory will probably be erected.

Falmouth—Electric light Plant.—The Falmouth Electric Light & Motive Power Co. has been incorporated by J. C. Hamilton, J. W. Thompson, J. N. Riggle and others to erect an electric-light plant. The capital stock is \$50,000.

Flemingsburg—Tobacco Factory.—P. E. Million & Co., of Flemingsburg, have made a proposition to move their tobacco factory to Flemingsburg.

Flemingsburg—Sash, Door and Blind Factory. The McElwee Manufacturing Co. has been incorporated with W. J. Hendricks, president, to manufacture sash, doors and blinds. The capital stock is \$200,000.

Frankfort.—A bill has been introduced in the legislature to incorporate the Green River Land Development, Manufacturing & Mining Co.

Georgetown—Distillery.—The distillery at Hunters Bottom is reported as to be enlarged.

Georgetown—Ice Factory.—The company mentioned last week as organized to erect ice factory has been incorporated as the Georgetown Ice Co. with a capital stock of \$20,000.

Glasgow—Marble Works.—J. W. Dearing has commenced the erection of a new building for his marble works, lately mentioned, and may put in a rubbing bed and saw.

Greenup—Fire-brick Works.—The establishment of fire-brick works is talked of. W. M. Stevens can give information.

Henderson—Planing Mill.—The Kentucky Planing Mill is being enlarged.

Hopkinsville—Machine Shop.—J. Metcalf will probably establish a machine shop.

Lancaster—Publishing.—J. R. Marrs, of Danville, has, it is reported, purchased the Garrard County Printing & Publishing Co.'s plant and will expend \$5,000 on improvements.

Lexington—Ice Factory.—The Hercules Ice Co. has been incorporated by E. M. Norwood, W. J. Loughridge, J. C. Rogers and others to manufacture ice. The authorized capital stock is \$150,000.

Lexington—Canning Factory.—A canning factory is talked of.

Lexington—Car Shops.—The Kentucky Union Railway Co. (office, Louisville, Ky.) will, it is reported, erect car shops in Lexington.

Louisville—Veneer Mill.—The Louisville Veneer Mills Co., lately mentioned as incorporated, succeeds D. E. Kline, Jr. It has purchased some additional machinery and will probably add more.\*

Louisville—Harness Factory, &c.—The Curd & Sinton Manufacturing Co. contemplates enlarging its harness factory and saddlery.

Louisville—Brewery.—The Schaeffer-Meyer Brewing Co. has, it is stated, erected a new brewery.

Louisville—Artesian Well.—The Louisville Artificial Ice Co. is sinking an artesian well.

Louisville—Corn Mill.—E. J. Mercke & Co. are increasing capacity of their corn mill.

Louisville—Furnace.—The Schmiedbarenguss Furnace Co., of Newport, will erect a Schmiedbarenguss furnace plant in Louisville.

Madisonville—Stave Factory.—U. J. Holland will probably add the manufacture of staves to his saw mill.

Madisonville—Laundry.—Howard & Sisk are reported as to start a steam laundry.

Marion—Electric-light Plant and Ice Factory.—An electric-light plant and an ice factory have, it is reported, been erected.

Middlesborough—Foundry and Machine Shops. The Pioneer Iron Works has been incorporated by William Arthur, J. W. Forrest and S. W. Ritchie to erect foundry and machine shops. The capital stock is to be \$20,000.

Middlesborough—Gas Works.—A company has been organized to erect the fuel gas works lately mentioned, and has put in a plant for experimental purposes. The Middlesborough Town Co. can give information.

Newport—Ice Factory.—It is reported that an ice factory is being erected.

Paris—Broom and Soap Factory.—It is reported that a broom and soap factory will be started.

Richmond—Land.—The Richmond Investment Co. has been organized by C. D. Chenault, O. H. Harrison and others, and purchased 130 acres of land from H. B. Dillingham for \$78,000, as reported in last issue (under Paris).

Russellville—Electric-light Plant.—A company is reported as being formed to erect an electric-light plant.

Somerset—Water Works.—The construction of a system of water works is reported as contemplated. The mayor can give information.

Spottsville—Distillery.—It is reported that St. Louis (Mo.) parties contemplate erecting a distillery in Kentucky, and will probably locate it in Spottsville.

Winchester—Land.—The Winona Land Co. has been organized with a capital stock of \$65,000 and has purchased 100 acres of land.

Winchester—Land.—The Bright Tract Land Co. has been incorporated with S. D. Goff, president, and L. H. Jones, vice-president, to buy and improve land. The capital stock is \$50,000.

Winchester—Water Works.—It is reported that a company is being organized to construct the water works previously mentioned.

## LOUISIANA.

Baton Rouge—Ice Factory.—The Baton Rouge Ice Manufacturing Co. is reported as contemplating enlarging its factory.

Crowley—Rice Mill.—A rice mill is reported as to be erected by the Farmers' Alliance.

Foster—Sugar-house.—S. M. Swenson lately mentioned as letting contract for a 9-foot low pressure vacuum pan to be erected at his sugarhouse, also contracted for a 3 roller cane mill.

Jeannerette—Sugar-house.—A. L. Monnot contemplates erecting at his sugar-house, lately mentioned, a Swenson double effect, also putting in two centrifugals and 6 boilers.\*

Monroe—Cotton Compress.—F. L. White will, it is reported, organize a company to manufacture his patient-lever cotton compress.

Monroe—Oil Mill.—The Planters' Oil Mill has been incorporated with a capital stock of \$100,000 to erect the cotton-seed oil mill lately mentioned.

New Orleans—Box and Excelsior Factory.—F. P. Magee & Co. are reported as to start a box and excelsior factory.

New Orleans—Ice Factory, etc.—The Louisiana Ice Manufacturing Co. will enlarge its factory and expects to add a refrigerating plant.

Shreveport—Factory.—A company has been organized with C. H. Minge, president; F. M. Hicks, vice-president, and Andrew Currie, secretary, to manufacture a Paris green distributor.

Shreveport—Canning Factory.—T. H. Morris, E. J. Leman, S. G. Dreyfus and others have organized a \$50,000 stock company to erect the canning factory recently mentioned.

St. Joseph—Saw Mill.—The Marydale Land & Lumber Co. will rebuild at once their saw mill lately reported as burned.\*

## MARYLAND.

Baltimore—Ice Factory.—Thomas Sturgis and William C. Lane, of New York city, and O. Hammond, Jr., lately mentioned as to enlarge their ice factory, will put in machinery to increase capacity from 55 tons to about 300 tons per day.

Baltimore—Electric-light Plant.—The bill recently reported as introduced in the legislature at Annapolis to incorporate the Woodberry & Belt Electric Light & Power Co. has been signed by the Governor and become a law.

Baltimore—Bottling Works.—The Avon Bottling Co. mentioned in last issue purchased the plant of T. B. Carter & Co.

Baltimore—Dredging.—The city council has decided to appropriate \$10,000 for dredging Jones' falls. The harbor board will superintend the work.

Baltimore—Iron Mines, Timber, etc.—The North Star Iron Co. has been incorporated by B. N. Baker, G. C. Jenkins and others, of Maryland, and John Reilly, of Pennsylvania, to deal in and develop mineral and timber lands in Maryland and Minnesota. The capital stock is \$5,000,000.

Baltimore—Bridge Works.—W. B. Brooks, James Sloan, Jr., W. F. Frick and other local parties will, it is stated, with New York city, Pittsburgh, Pa., and Cumberland capitalists, organize a stock company to establish bridge works at Curtis Bay or Canton. It will probably purchase the plant and tools used by the Baltimore & Ohio Railroad at its Mount Clare shops. The capital stock is to be not less than \$250,000, nor more than \$500,000.

Baltimore—Foundry.—W. S. Rayner, Howard Carlton and others are organizing a company to establish an iron foundry at Curtis Bay. The capital stock will be from \$100,000 to \$200,000.

Baltimore—Terra cotta Works.—The Lindermann Terra-cotta Roofing Tile Co. has been incorporated by E. C. Lindermann, C. W. Adams, Horace Noble and others. The capital stock is to be \$50,000.

Chestertown—Basket Factory.—The American Straw Board Co., mentioned in last issue, is erecting a basket factory to have a daily capacity of 20,000.

Concord—Gin.—R. A. Brown will rebuild his cotton gin recently mentioned as burned.

Concord—Gold Mine.—A mill house and machinery for grinding and washing ore are being placed at the R. W. Allison gold mine recently reported as being developed by J. L. Earmhart and others.

Cumberland—P. & Mill.—The Cambria Iron Co., of Johnstown, recently mentioned as leasing and to operate the Baltimore & Ohio Railroad Co.'s rolling mill, is putting in new machinery and expect to be at work by April 1st.

Cumberland—Brick and Tile Works.—The Cumberland Brick Co. mentioned in last issue will locate brick and tile works near Cumberland.

Frostburg—Water Works.—The bill recently reported as introduced in the legislature at Annapolis to authorize the issuance of \$40,000 of bonds to establish water works has been signed by the Governor and become a law.

Knoxville—Iron Mine.—An iron mine is being opened on the property of Hon. W. A. Stewart, of Baltimore, and will probably be developed.

Towson—Brewery.—The National Brewing Co. has been incorporated by Bernard Kahn, J. L. Strauss D. K. E. Fisher and others. The capital stock is \$320,000.

Washington, D. C.—Land.—The Morven Land Co. has been organized with Washington Danenhower as president. The capital stock is \$50,000.

West Beaver Creek—Flour Mill.—P. R. Doub has let contract for machinery to change his flour mill lately mentioned to the roller system.

Westminster—Oil Mill and Twine Factory.—The erection of a twine factory and a linseed oil mill is talked of. James F. Rinker can give information when anything is done.

## MISSISSIPPI.

Aberdeen—Foundry and Machine Shops.—Endellin & Beronio are, it is reported, organizing a stock company to enlarge and operate their foundry and machine shops.

Aberdeen—Mattress Factory.—W. H. Boatner & Co. operate the mattress factory mentioned in last issue.

Aberdeen—Foundry and Machine Works.—A foundry and machine works will probably be erected.

Aberdeen—Furniture factory.—The erection of a furniture factory is proposed.

Biloxi—Cotton Mill.—Captain Longevin will, it is reported, erect a cotton mill.

Corinth—Barrel-hoop Factory.—The erection of a barrel-hoop factory is probable.

Crystal Springs—Water Works.—The construction of a small system of water works is contemplated. Address H. C. Price.\*

Friars Point—The Friars Point Land & Improvement Co. has been organized with D. A. Scott, president, and H. W. Sessions, secretary. The capital stock is \$25,000.

Jackson—Ice Factory.—The Jackson Ice Manufacturing & Machine Co. contemplates putting in a 10 or 15 ton ice machine.\*

Kosciusko—Brick-yard.—It is reported that a brick-yard will be started.

Macon.—A. T. Dent, mayor, writes that there has been some talk of the organization of the stock company lately mentioned to erect cotton factory, etc., but nothing definite has been done.

Pass Christian—Canning Factory.—Efforts are being made to organize a stock company to erect a canning factory. John H. Lang can give information.

Scranton—Lumber Mill.—Matlack & Mitchell are putting new machinery in their lumber mill.

Vicksburg—Cotton Compresses.—The reported consolidation of the Vicksburg Cotton Compress Co. and the Planters' Cotton Compress Co. mentioned in last issue has not been effected.

Warrenton—Levees.—An appropriation of \$100,000 has been made to protect the levees along the Mississippi river from Warrenton to the head of the passes, 48 miles.

## NORTH CAROLINA.

Albemarle—Mining.—The Lowder mine, it is reported, will be reopened.

Asheville—Electric-light Plant.—The Asheville Light & Power Co. has let contract to the United Edison Manufacturing Co. for an Edison electric-light plant.

Bryson City—Saw Mill.—W. G. Lake & Co. are erecting a saw mill near Bryson City.

Carthage—Distillery.—Currie & Rowan will erect, it is stated, a turpentine distillery.

Cary—Saw Mill, &c.—W. M. Jones & Co. will, it is stated, erect a saw mill.

Chambers—Tannery.—It is reported that D. McKenzie has started a tannery.

Charlotte—Reduction Works.—S. G. Burn writes in reference to the establishment of reduction works by Thomas A. Edison, mentioned in last issue, that if such a move is decided upon, it will be 12 months before work begins.

Concord—Gin.—R. A. Brown will rebuild his cotton gin recently mentioned as burned.

Concord—Gold Mine.—A mill house and machinery for grinding and washing ore are being placed at the R. W. Allison gold mine recently reported as being developed by J. L. Earmhart and others.

# SUPPLEMENT

## CARDIFF.

One of the latest of the mammoth Southern enterprises in which Northern capitalists have engaged, under the wise and experienced leadership of Mr. W. P. Rice, now of Fort Payne, Alabama, but formerly a citizen of Boston, Mass., is the organization of the Cardiff Coal & Iron Co. with a capital stock of \$5,000,000. This company has purchased many thousand acres of coal, iron and timber land adjacent to the Cincinnati Southern Railroad, about seventy-five miles north of Chattanooga, and within a few miles of the flourishing town of Rockwood, Tenn. These lands are situated in Cumberland, Roan and Morgan counties, in East Tennessee. The famous blue-grass region of Kentucky lies directly to the north, on the main route to Cincinnati. One hundred and twenty-five miles to the northeast is Middlesborough, and the fast-developing region of Cumberland Gap. The spot selected for the center of operations is in the heart of the beautiful Tennessee valley and of this extensive, famous and rapidly-developing iron and coal territory.

Cardiff, a port town of Glamorganshire county, South Wales, Great Britain, has a history that extends back to the reign of King Arthur. It was founded A. D. 1080. At the beginning of the nineteenth century it had less than a thousand inhabitants, and was not then considered a port, but only a creek—tributary to Bristol, its near and affluent neighbor. But from the earliest days Glamorganshire county (in which is the famous but more modern town of Swansea) has been noted for its vast fields of iron ores, coal and limestone, and Cardiff, for more than eight centuries, has been the center of many diversified iron industries, and for at least a century it has been famous for its exports of coal and iron. This name has been appropriately selected for this new enterprise because of its historic significance; for in the lands purchased by this company are coal measures, vast veins of high grade iron ores, and inexhaustible stores of limestone, that surpass in extent those of the valley of the Neath, of Aberdare and of Merthyr, from all of which ancient Cardiff has drawn her supplies for more than 800 years.

Many Southern enterprises have been inaugurated by promoters who have not realized the need of providing sufficient resources to counterbalance the mistakes inevitable from the lack of experience and absence of local associations. The Cardiff Coal & Iron Co. has been organized by and is composed of men of too much wisdom and experience to commit such an error. Among the directors associated with Mr. W. P. Rice are the following well known

successful business men: Hon. William Warner and Dr. J. M. Ford, of Kansas City, Mo.; H. C. Young and C. L. James, of Boston, Mass.; Hon. Robert Pritchard, of Chattanooga, Tenn.; Hon. J. F. Tarwater, of Rockwood, Tenn.; Hon. S. E. Pingree, ex-Governor of Vermont; Hon. John M. Whipple, of Claremont, N. H., and Hon. Carlos Heard, of Biddeford, Me. The high reputation of all these gentlemen for integrity, good judgment and financial strength, is a guarantee in advance of the success of their great enterprise. They will commence operations with no incumbrance whatever on their extensive properties, and with \$2,000,000 in cash in their treasury. This they expect to realize from the sale of treasury stock, and from the proceeds of a mammoth sale of town lots which will begin April 22d, and continue several days.

The charter of the company has a broad scope: "The encouragement of immigration, the locating, establishing and building of towns and cities, the purchase, improvement, development and sale of property, and encouragement of industries, are the objects for which this charter is granted." Ample powers are conferred for the carrying out of these purposes in detail.

It requires good judgment to select a town site with reference to topography, to accessibility, to healthfulness, to minerals and their quantity and quality, and to the utility of agricultural as well as mining and manufacturing properties. Inexperienced men cannot do this judiciously. The many phases of the subject require careful consideration before a decision is made. This company is peculiarly fortunate in having among its directors several of the most successful town builders of the age. They are men of ripe judgment, who have been unvaryingly fortunate in all their former enterprises.

### Cardiff Coal & Iron Co.

The Cardiff Coal & Iron Co. has a capital stock of \$5,000,000, and has purchased a very extensive tract of many thousand acres of coal, iron ore and timber land at Cardiff, Tenn., about 70 miles northeast of Chattanooga, on the Cincinnati Southern Railroad, but a short distance from Rockwood, Tenn. These lands have been worked quite extensively, and are now in process of development, some large contracts for coal being on hand; in fact, the present demand is greater than the existing facilities for working the veins can supply.

The capital stock, as before mentioned, is \$5,000,000, of 50,000 shares, and it is proposed to dispose of these shares at \$50 each. It is also planned that the company expend the first year \$1,000,000 in the erection of an iron furnace, to cost at least \$350,000; water works, \$75,000; hotel, \$75,000; motor line, \$75,000; electric-light plant, \$25,000; schoolhouse, \$15,000; public building, \$50,000; building and loan company, \$150,000; church \$10,000; ice plant, \$25,000, and coke plant, \$50,000. There is an abundance of coking coal, red hematite ore, clay, timber and limestone. There appears no reason why there should not be founded here a city in every way as thriving as Fort Payne, Birmingham and Anniston, Ala. The railroad, the Cincinnati Southern, contingent to this territory, is already laying side tracks to the mines on these lands of the Cardiff Coal & Iron Co., and has already contracted for the erection of a handsome station.—Boston Commercial Bulletin.

## CARDIFF, THE COMING CITY.

Where Old England and New England Will Join Hands With Plans to Eclipse All Previous Records.

New England Ablaze With Enthusiasm over the Money-making Opportunities which will be offered at Cardiff at the Sale of Lots, Beginning on Tuesday, April 22.

A Natural City Site on the Northeast End of the Great Cumberland Coking Coal Plateau.

Millions in Spot Cash Ready for Immediate Investment in Various Industrial Plants.

A PLACE WHERE FURNACES WILL PAY ENORMOUS DIVIDENDS, AS PAST EXPERIENCE PROVES.

### THE OPPORTUNITY OF A LIFETIME.

QUINCY HOTEL,  
BOSTON, MASS., March 25, 1890.  
When W. P. Rice and Dr. J. M. Ford, who are recognized everywhere as among the most conspicuous developers of Southern resources and promoters of Southern prosperity, went to Europe a few months ago, a thousand investors waited anxiously for their return. No living man knew their mission further than that it meant some enormous Southern enterprise. These men have never undertaken any enterprise that has failed to make money for those who took stock under their advising.

And so, the writer, acting upon the theory of the immortal Patrick Henry, who declared in his matchless oration that he knew no way of judging the future but by the past, gives this advice. Take advantage of the opportunity to be offered at Cardiff and get there early on the day of sale.

Said a prominent Boston real estate man: "If I can secure business lots at Cardiff my fortune is made. I hope to buy these at \$50 a foot. Within a twelvemonth I can sell them for \$250 a foot, and that means \$100,000 profit."

The town of Cardiff is at the foot of the great Cumberland plateau, which is underlaid with coal measures, rich and inexhaustible enough to pay off the debt of the United States, the debts of all the Southern States and still have a profit at present prices of hundreds of millions of dollars.

Railroads will be built from Cardiff up and through this great coal-laden plateau, and a thousand coke ovens will be ablaze at Cardiff within the next two years.

The first coke furnace in the South was built in the vicinity of Cardiff. Prior to that, all Southern iron ore had been smelted by charcoal. The furnace referred to was constructed on plans long since out of date. Nevertheless it last year, so I am told, earned a dividend of 8 per cent. on a capitalization of \$1,000,000. It is also alleged that during 20 years' work this furnace's lowest earning per annum was \$35,000. Better furnaces, or at least equally productive ones, can now be built for \$100,000. At the same rate of earning each of the new furnaces soon to be built at Cardiff ought to pay 80 per cent. dividend, provided the price of iron keeps up.

On the other hand, should the price of iron fall, the Cardiff furnaces will be able to run and pay good dividends when every furnace in Ohio and Pennsylvania shall be compelled to go out of blast; for I am confident that iron can be made at Cardiff

for \$8.50 a ton. Now the present price for the class of iron here turned out is about \$15.00 at the furnace. And so Cardiff furnaces can afford a depreciation of \$5.00 a ton and still keep in blast at a profit.

The company which has been organized to build a city at Cardiff is one of the strongest in every way, if not the very strongest, that ever embarked in a similar enterprise. It will have \$2,000,000 in cash to begin with. The personnel of the stock-holders is calculated to inspire confidence in financial and industrial circles not only in New England, but in the West and South. The fact that such experienced town-builders are identified with the undertaking is a matter of no less importance than the company's ample capital and the magnificent resources which that capital is intended to develop. There will be no bunglings, no back-sets.

I have just spent an hour talking to Mr. Rice. His words and his manner indicate a conviction that Cardiff will eventuate in the greatest success yet achieved in the line of industrial development. The fact that he believes in it, and is directing it and inviting his friends to invest in it, is almost a guaranty that every dollar placed in Cardiff will bring another dollar to the investor.

The holdings of the company aggregate 50,000 acres of unsurpassably rich coal and iron lands. Much of this is covered with the very best timber suitable for a variety of wood-working industries. Moreover, when this timber shall have been cut, the land itself will be valuable for agricultural, and more especially, for horticultural purposes.

The location of the place is such as to insure a number of railroads. Already the Cincinnati Southern passes through it, while a branch of the East Tennessee runs across from Knoxville to within 3 miles of it. It is 70 miles northeast of Chattanooga, and about half that distance west of Knoxville. From Cincinnati to Cardiff is about eight hours' ride by ordinary express trains.

About \$300,000 will at once go into buildings, over 30 lots having been sold with a contract for the immediate construction of that many substantial two-story brick business houses, while about the same number of residence lots have been sold with a covenant that a handsome dwelling shall be built upon each of them at once.

Plans have been accepted for a magnifi-

[CONTINUED ON PAGE IV.]

On Tuesday, April

THE SALE OF LOT W

THE COMING CITY  
CAR

In the Richest and Most Inexhaustible Coal

To be Built by W. P. RICE and his  
that purpose organiza

CARDIFF COAL & IRON

With a Capital of Five Millions

The Lots will be offered by the Company at a moderate price, with an enhancement in values to be effected by the Company's plan of a

TEN VESTIBULED STAIRS

Will be run from New England alone, besides special

April 22d, 1890,

WILL BEGIN AT \_\_\_\_\_

CITY OF  
**CARDIFF, TENN.**

**Coal and Iron Region in the South.**

and his associates, who have for  
organized the

**IRON COMPANY,**

**Fifteen Millions of Dollars.**

ate schedule and the buyers will have the full benefit of the  
nion a scale never heretofore equalled at any new town.

**SPECIAL TRAINS**

Specials from all over the South and West.

[CONTINUED FROM PAGE 1.]

cent hotel which is to be built forthwith by the company.

In the rotunda of the Quincy House here in Boston I have heard a hundred men talking over plans which will materialize in buildings and plants at Cardiff. This local enthusiasm exceeds anything I have ever witnessed. I was reminded of the time when the 4 per cent. government bonds were being sold some years ago at the postoffices in large cities. People fairly stood in line to see Mr. Rice about getting a berth in one of the ten vestibuled specials that will pull out of New England to reach Cardiff on April 22. I stood in sight of the Quincy House register for 10 minutes after I had sent my card to Mr. Rice, and out of seven men who registered five enquired when they could see Mr. Rice.

Somewhat it got out that I was from the South. The consequence was, a dozen prosperous looking men approached me while in Boston with enquiries about Cardiff.

I shall take the next train for Cardiff, and spend a few days there as much with a view to pleasure as to professional work—for there is no more delightful environment in America—and when I shall have seen all that is to be seen, I shall endeavor to write a plain, matter-of-fact but, withal, instructive letter, for the benefit of the thousands of people all over the Union who will naturally feel an interest in a locality which gives such promise of profit to investors.

Of course there will be an immense crowd at the sale, but I am told that every possible effort will be made to accommodate buyers. The New England excursionists will eat and sleep on their cars, as will the buyers from a number of other cities. The closeness of the place to Chattanooga and to Knoxville, and the keen and commendable interest the railroads are taking in the success of the undertaking, justify the expectation that a sufficient number of trains will be run to enable buyers to come to Cardiff from Chattanooga & Knoxville and return the same day at almost any hour convenience may require.

THOMAS P. GRASTY.

#### Cardiff Land Titles Perfect.

[Extract from the forthcoming prospectus.]

The Cardiff Coal & Iron Co. properties are situated in the three Tennessee counties of Cumberland, Roane and Morgan, and the titles have been thoroughly investigated and approved by the best real estate lawyers of Tennessee, comprising the law firms of Wheeler & Marshall, of Chattanooga; Pritchard, Sizer & Thomas, of Chattanooga; Owens & McElwee, of Rockwood, and Wright & Wright, of Wartburg and Rockford. With them have co-operated other distinguished counsel, among the number the law firm of Warner, Dean & Hagerman, of Kansas City, Mo.

Mr. Wheeler is well known not only by legal reputation but officially as the former attorney of the United States for the Chattanooga district. Mr. Warner in like manner is known, not only by legal fame but as a distinguished member of Congress, and national commander of the Grand Army of the Republic. Messrs. Pritchard and Marshall are unsurpassed in their general and technical knowledge of the real estate laws of Tennessee, and the former is a recognized expert authority on East Tennessee titles. Messrs. Owens & McElwee and Wright & Wright are the respected and principal law firms in the vicinity of the corporation's property, and together with Mr. Robert Pritchard, are personally as well as professionally familiar not only with its titles, but with its extent, minerals, timber, industries and agriculture.

The company's acquisitions, approved by these legal authorities as of absolutely good and indefeasible title, exceed fifty

thousand acres, or more than seventy square miles, equalling if not surpassing in easily available mineral riches, (they are confident from actual workings on the spot,) any tract in the great Alleghany belt.

Preliminary to a part of the purchases, a general inspection was made (with that reported result) by Professor G. B. West, the principal mining expert of Birmingham. A thorough topographical survey then was immediately instituted, and is still carried on, under the direction of Chief Engineer Otto Sonne, and a scientific survey was simultaneously conducted under the direction of A. C. Gill, geologist, the two in conjunction investigating in detail both the mineral and the agricultural resources of the lands and their accessibility for mining, manufacture, cultivation and transportation.

By rigid instruction to all its agents the company has exercised such scrupulous fairness in all these transactions and exhibited such abundant pecuniary resources for every need, that it has attracted the good-will of everybody concerned, and has entirely escaped a class of dangers, from local prejudice and animosity, on which Southern undertakings sometimes have been wrecked. Southern, as actively as Northern and Western people, are interested in and in behalf of the company's enterprise, and it is safe to say that it has no more cordial well-wishers than the old inhabitants of the region in which it is prosecuted.

#### Progress of the Iron Industry.

[Editorial New York Sun, March 7, 1890.]

Within the last few days a contract has been concluded for supplying at a price satisfactory to the sellers, six hundred tons of Chateaugay pig iron, to be sent to England for manufacture there; and this may turn out to be only the beginning of what may become at no distant day a very extensive and important trade.

It appears that the cost of making iron in England has risen very greatly. Coke, which only two years ago was sold at seventeen shillings and sixpence or eighteen shillings a ton, is now worth twenty-eight shillings to thirty shillings. Delivered at furnaces it has been sold at thirty-two shillings to thirty-five shillings, and for export at forty shillings. At the same time the best qualities of Cumberland ores, which, in 1888, were ten shillings and twelve shillings and six pence, are now as high as twenty-four shillings to twenty-six shillings, and quite scarce at that.

These changes have been brought about in a great measure by the greater depth at which coal now has to be mined in England and the increased expense of bringing it to the surface, whence the extraordinary increase in the price of coke. This fact, combined with the present scarcity and expensiveness of iron ores, has raised the value of iron in European markets to such an extent that the cost of producing iron there is quite equal to its cost in this country, notwithstanding the circumstance that labor there is paid one-third less than here.

This renders it quite probable that England, and indeed all Europe, have reached the point where they can no longer produce cheap iron; and should this prove to be positively the case, it will open up for the iron producers of the United States an era of unexpected activity. This is the only country which possesses an immense stock of iron and coal, and it is now supplying the entire domestic demand. With the new plants which are everywhere in process of construction, we shall soon be in a condition to supply an immense export trade also.

No industry has been so rapidly developed as that of iron and coal in this country. Twenty years ago it was comparatively unimportant, but in 1890 we shall produce more tons of steel than any other nation.

#### A New Southern Enterprise.

Mr. W. P. Rice, who is well known to Boston and New England capitalists by reason of his prominent connection with the Fort Payne, Ala., Coal & Iron Co. is now at the Quincy House. He, with Dr. J. M. Ford, who is also identified with the Fort Payne enterprise, and other friends, have just returned from an extended trip through Europe. Mr. Rice is now arranging another project, which promises to be the most extensive Southern enterprise yet organized. The Cardiff, Tenn., Coal & Iron Co., capitalized for \$5,000,000, is the name of the new corporation. It has already purchased a very large tract of the finest coal and iron ore land in the South, at Cardiff, Tenn., a place about 70 miles northeast of Chattanooga, on the Queen & Crescent Road, and not far from Rockwood. This property has already been extensively worked and is at the present time under development, large contracts for the coal being on hand. Indeed, the present demand is greater than the supply that can be furnished with the existing facilities. It is the purpose of the company to incorporate the town of Cardiff, and to immediately commence on a broad scale to build up a large industrial center.

Parties who have ample capital for business purposes have already expressed an intention of locating at Cardiff, and it is conservatively estimated now that fully \$1,000,000 in cash will be put into new industries at Cardiff within the next year. The company is now formulating a plan, in connection with its proposed big land sale, that will enable purchasers to secure their lots at a fair price, and a bidding up of prices to an unduly high figure will not be allowed. It is not proposed in any way to encourage or endorse an unhealthy "boom." The land will be offered on its merits at reasonable figures, and every purchaser at the sale will have a practically sure opportunity to make a good profit almost immediately. The company has in its management gentlemen well known as successful business men and capitalists—men who are never identified with anything that does not have in it a high degree of merit.

The general manager and treasurer will be men who are especially fitted for their respective positions and men that have a wide influence. Mr. Rice is now arranging for an excursion to Cardiff, to leave Boston about April 15, and to arrive there in time for the land sale. This excursion will be the largest that ever went out of New England, and will include many of the best-known capitalists in the East. Over 1000 people will, it is expected, make the trip from New England alone, and excursion parties will also go from New York, Chicago, Louisville, Frankfort, Lexington, Middlesboro, Ky., Nashville, Chattanooga, Birmingham, Montgomery, New Orleans, Kansas City, Atchison and Memphis. The New England party will have special trains of Pullman cars, thoroughly equipped for a two weeks' journey. A committee of 100 gentlemen who shall be authorized to issue invitations will be announced in a few days, and tickets will be furnished by these at a very low rate. This enterprise has been under consideration by Mr. Rice and his associates for the past eight months, and the most careful preparation for its presentation to the investing public has been made.

It promises, altogether, to be one of the largest and most successful "deals" ever undertaken in this country. In this connection attention should be called to the wonderful success of the Fort Payne enterprise, in which Mr. Rice still holds large interests and in which he is as firm a believer as at the start. He is putting the same energy and effort into this new project as was put into the Fort Payne development, and he is confident that it will be, in every way, a grand success.—Boston Traveler.

#### Cardiff's Future Settled.

A Times reporter called at the office of the Cardiff Coal & Iron Co. and found Col. Young in, but, though courteous as he always is, yet too much engaged to give the reporter more than a minute or two of time.

From him we learned that the company had organized under the charter on the 13th inst. Col. Young consented to take the general management of affairs here. His residence has already been contracted for and will be completed in the shortest space of time possible.

The streets are being graded as the weather will permit, and excavations for buildings being made. The contract has been let for six fifty-foot brick blocks, and work will be begun at once. The foundation for a passenger depot is being laid; the building will be one of the finest on the line of the Cincinnati Southern road.

The architects for the company with assistants will arrive from Boston to-day; his office will be a busy one, as the plans for all the company's buildings are to be gotten out immediately.

The plans for a large hotel have been drawn and approved. It will be one of the finest and best arranged, and be a credit to any city in the South.

The charter for the National Bank of Cardiff has been received; J. F. Tarwater, of Rockwood, will be its president; the building with its safe and other fixtures will be put up as fast as possible.

The furnaces will be on the latest and most approved plan.

An immense engine and machinery for brick making is being put in, and brick of the very best quality will be furnished for building purposes.

Applications for lots for all kinds of business purposes are coming in rapidly from all parts of the country; most of the applicants desire lots where buildings of brick are required to be erected within a limited time. From present outlook hundreds of lots could be sold at private sale at once upon which the purchaser would build business houses that would be a credit to any city.

The character of the applicants show the confidence of the people in the future of the new town.

To enumerate all the transactions going forward would be impossible in a newspaper article, but we will keep our readers posted as to the general progress of the enterprise.—Rockwood (Tenn.) Times.

#### W. P. Rice.

Mr. W. P. Rice, whose name is so familiar among all New England capitalists as a gentleman actively engaged in building up towns and developing mineral lands in the South, and who has been particularly instrumental in promoting the growth of the cities of Denison, Texas, and Fort Payne, Ala.; in fact, has been the most prominent person identified in the syndicate which is so largely interested in these prosperous towns, has recently returned from Europe, where he has spent several months, and is now perfecting another enterprise which bids fair to be a very extensive and successful undertaking. Mr. Rice has thus far met with unqualified success in whatever project he has engaged, and in this new organization, known as the Cardiff Coal & Iron Co., has interested capitalists and many of our strongest business men, those identified only with something which possesses a high degree of merit.—Boston Commercial Bulletin.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South cannot find a better medium than the MANUFACTURERS' RECORD.

Dillsboro—Kaolin Mines.—Work has been resumed at the mines of the Carolina Clay Co., and it is reported that it will enlarge its plant. M. W. Bryson is in charge.

Dillsboro—Saw Mill.—Cummings & Bufsum, lately mentioned, are erecting dry kilns and a band saw mill to have a daily capacity of 75 M feet; also constructing a dam and lumber boom. Water power will be used.\*

Durham—Fertilizer Factory.—The Durham Fertilizer Co., mentioned in last issue, will rebuild its factory in the summer.

Fayetteville—Machine Shops.—The Cape Fear & Yadkin Valley Railroad Co. (office, Greensboro) does not intend enlarging its machine shops mentioned in last issue.

Fayetteville—Cotton Mill.—The Fayetteville Cotton Mills has increased its capital stock \$10,000.

Fayetteville—Lumber Mill.—The Black River Lumber & Shingle Co. has been organized with James D. McNeill, president, and will erect plant at once.

Hendersonville—Publishing.—The Hendersonville Publishing Co. has purchased outfit for its publishing and printing office.

Hickory—Chair Factory.—A company has been organized by local parties and Mr. Conent, a Northern capitalist, to establish and operate a chair factory.

Hickory—Lumber Mill.—H. C. Park, (of Park, Davis & Co., Detroit, Mich.) and local parties have organized the Hickory Lumber Co. It has purchased a site on the Catawba river, and will probably erect a lumber mill.

High Point—Chair Factory.—R. J. Lindsay & Co. will, it is stated, erect a chair factory.

High Point—Gold Mine.—An English party is reported as purchasing of C. G. Mann the Suares gold mine near High Point, and will reopen the same.

High Point—Basket Factory.—The Modern Barn Co. has put new machinery in its basket factory to double its capacity.

Jones County—Saw Mill.—A. D. Jones and S. S. Turner will erect a saw mill.

Lenoir—Mining.—The Bee Mining Co. has purchased a 10-ton Wiswell crushing mill for its works.

Manchester—Dry-kiln.—Mr. Deysher, of New Berne, is erecting, it is reported, a dry-kiln for the Starr Lumber Co.

Marion—Brick-yard.—J. P. Bondurant, of Augusta, Ga., will establish a brick-yard.\*

Marion—Water Works.—The establishment of water works is contemplated.

Morehead City—Furniture Factory.—J. B. Ellis, of Pennsylvania, is reported as prospecting with a view to locating a furniture factory in Morehead City.

Mount Airy—Cotton Mill.—New machinery has been put in the Laurel Bluff Cotton Mill.

Mount Airy—Tobacco Factory.—Folkner & Fulton will start a tobacco factory.

Mount Olive—Lumber.—The Pioneer Lumber Co. has been incorporated with D. J. Aaron, president; W. P. Hall, vice-president and general manager; J. D. Aaron, secretary and treasurer.

New Berne—Canning Factory.—H. J. England and others will establish, it is reported, a canning factory.

Raleigh—Lime-kiln.—West Virginia parties will operate the lime-kiln, reported in last issue as to be established.

Ramsur—Saw Mill.—A saw mill is being erected. Clarence Watkins can give particulars.

Randleman—Cotton Mill.—The Randleman Manufacturing Co. will enlarge its building and add new machinery.

Rutherfordton.—J. S. Roland & Son will operate the spoke and rim factory lately mentioned as to be erected.\*

Sanford—Furniture Factory.—J. W. Scott, Jr., and Murphy Lemon are reported as erecting a furniture factory.

Sylva—Pottery.—The establishment of a pottery is contemplated.

Tarboro—Knitting Mill.—J. F. Shackelford will enlarge his knitting mill, it is reported.

Waynesville—Paper and Pulp Mills.—Inducements are being offered to secure the erection of paper and pulp mills. G. S. Ferguson can give information.

Wheeler—Iron Furnaces.—The East Tennessee & Western North Carolina Railroad Co. (office, Cranberry) is reported as contemplating the building of two iron furnaces.

Wilmington—Mining.—W. R. Reeves has purchased, it is stated, the Howie mine of Isaac Bates, and will develop.

Wilmington—Coal Bins.—The Egypt Coal Co. will erect, it is reported, three coal bins at Point Peter, on North East river.

#### SOUTH CAROLINA.

Aiken—Water Works, etc.—The Aiken Water & Light Co. has been incorporated by P. A. Emanuel, William Turnbull, G. W. Croft and

others to build the water works lately mentioned, and may also furnish light. The capital stock is \$5,000.

Annandale—Canning Factory.—William M. Hazzard, E. P. Alexander and R. J. Donaldson will probably establish an oyster canning factory.\*

Barnwell—Sash, Door and Blind Factory, etc.—The Enterprise Manufacturing Co., lately reported, will erect the sash, door and blind factory mentioned in last issue; also grist mill.

Blackville—Artesian Well.—An artesian well is to be sunk.

Charleston—Cotton Compress.—Neil Macdonald and A. Gallagher, representing a New York City company, and recently reported as negotiating for the property of the Union Press & Wharf Co., have purchased the same, it is stated, for \$150,000.

Charleston—Car Works, etc.—The \$1,000,000 enterprise mentioned in last issue as to be established by a syndicate, provided inducements were offered, is said to be car works and car-wheel factory, and it is stated that negotiations are being made with Thomas Young for a site.

Columbia—Spool silk Factory.—The Massachusetts party, reported in last issue as in correspondence with J. C. Iredell, has decided, it is reported, to locate his spool-silk factory in Columbia, provided a stock company can be organized to furnish \$10,000, half the capital stock. The company to be known as the Palmetto Silk Co.

Easley—Oil Mill.—Hudgens & Russell can give information on the projected cotton seed oil mill lately mentioned.

Greenville—Cotton Mill.—The Huguenot Mills is putting in 550 additional spindles.

Mccormick—Saw and Grist Mill, etc.—James Cuthran, Jr., is rebuilding his saw mill, grist mill and cotton gin, lately reported as burned.

Newberry—Pants Factory.—The establishment of a pants factory is contemplated.

Prosperity—The Prosperity Investment & Improvement Co. has been incorporated by J. M. Wheeler, R. L. Luther, W. A. Mosely and others. The capital stock is to be \$5,000.

Seivern—Kaolin Mines.—The Imperial Kaolin Co., controlling 2,000 acres of kaolin land, is preparing to develop mines near Seivern.

Summerton—Broom Factory.—Mr. Bowman is reported as to move his broom factory from Bishopville to Summerton.

Summerville—Land, etc.—The A. W. Taylor Land & Lumber Co. has been incorporated by A. W. Taylor, Rudolph Siegling, O. F. Wieters and others, of Charleston, to deal in real estate and conduct a general lumber and manufacturing business. The capital stock is \$75,000.

Woodruff—Plow Factory.—L. C. Ezell will, it is reported, start a plow factory.

Woodruff—Factory.—It is reported that V. M. Snow has started a factory to manufacture his patent compost distributor.

#### TENNESSEE.

Athens—Iron Furnace.—It is probable that the owners of the Starr's mountain iron property will consolidate with the Athens Mining & Manufacturing Co. to secure the building of an iron furnace.

Bristol—Foundry and Machine Shop.—The Bristol Foundry & Machine Co. contemplates putting in additional machinery.\*

Bristol.—The Bristol Investment Co. has been incorporated.

Bristol—Silk Factory.—It is reported that a Dover (Del.) silk manufacturer contemplates moving his factory to Bristol.

Camden—Saw Mill.—J. R. Hudson contemplates erecting a saw mill.

Chattanooga—Land.—The Glen View Land Co. has been incorporated by F. F. Wiehl, J. A. Hart, R. M. Tankeley and others to purchase and improve land.

Chattanooga—Dynamite Factory.—The Dixie Dynamite Co. will put a new boiler in its factory.

Chattanooga—Electrical Works.—Robert Williamson will, it is reported, establish electrical works.

Chattanooga—The Universal Sewing Machine Motor Attachment Co. is the name of the \$1,000,000 stock company mentioned last week as incorporated by J. L. Divine, R. V. Harden, D. W. K. Polk and others.

Chattanooga—Brewery.—The Chattanooga Ice & Bottling Co. is reported as to erect a brewery 110x200 feet.

Chattanooga—Foundry and Machine Shop.—The Truxall & Dunmeyer Machine Co., mentioned last week, will erect new foundry and machine shop.

Chattanooga—Flour mill.—W. T. Hutchison and J. B. Whitman, of Sweetwater; C. P. Robertson and others have incorporated the Mountain City Mill Co. to build the flour mill previously reported as to be erected by the Sweetwater Milling Co. It will erect a mill to be five stories, 50x100 feet, and have a daily capacity of 500 barrels. The capital stock is \$60,000.

Chattanooga—Marble Works.—The Chattanooga Marble & Stone Co. will put in a stone crusher, also machinery for the manufacture of grindstones.\*

Chattanooga—Cold-storage Plant.—A \$50,000 stock company is being organized to erect a cold-storage plant. R. H. Evans can give particulars.\*

Chattanooga—Furniture Factory.—Campbell & Co. have enlarged their furniture factory, increasing capacity, and will also put in machinery for the manufacture of wire mattresses or bed springs.\*

Chattanooga—Electric-light Plants, &c.—The Ridgefield Electric Light & Power Co. has been incorporated by C. A. Lyerly, S. W. Divine, J. S. O'Neal and others to erect electric-light plants, power-house, etc., in Tennessee.

Chattanooga—Planing Mill.—The Morrison Lumber Co. will probably change the location of its planing mill.

Chattanooga—Soap Factory.—Robert Marshall and John Russell, of Tullahoma, contemplate starting a soap factory.

Chattanooga—Malleable Iron Works.—It is reported that Gibson & Co. contemplate adding malleable iron works to their plant.

Chattanooga—Gas Works.—The East Chattanooga Gas Light Co. has been incorporated by C. A. Lyerly, J. L. Divine, F. H. Burns and others.

Cleveland—Water Works and Sewerage System.—The city will probably submit to a vote the issuance of bonds for the construction of water works and sewerage system. T. L. Cate can give information.

Cleveland—Fire-brick Works.—The Cleveland Fire-brick Co. contemplates putting in additional machinery.\*

Cleveland—Water Works.—Henry Hungerford, of New York, will submit a proposition to the city to construct water works.

Fairmount—Coal Mine.—Col. Britton is reported as organizing a company to develop a coal mine.

Franklin—Water Works.—The city desires bids on franchise for the establishment of the water works lately mentioned. P. E. Cox can be addressed.

Graysville—Coal Mines.—It is reported that S. C. Evans and B. F. Walker will consolidate their coal interests near Graysville and probably develop at once.

Greenfield—Stave Factory.—Hudson, Ward & Ray contemplate starting a stave factory.

Greeneville—Box Factory, &c.—The Greeneville Box Factory & Planing Mills has put in additional machinery, and will add more and probably erect a new building 50x100 feet.\*

Hustburg—Saw Mill.—Meyers Bros. are, it is stated, erecting a saw mill near Trotter's Landing.

Hustburg—Spoke Factory.—It is reported that a spoke factory is being erected.

Jasper.—The Sequatchie Real Estate Co. has been chartered.

Johnson City—The Watauga Water Co. has been incorporated to operate the water works lately mentioned.

Johnson City—Woolen Mill.—The erection of a woolen mill is talked of.

Johnson City—Planing Mill, &c.—It is reported that Illinois parties will erect a planing mill and sash, door and blind factory.

Johnson City—Steel Plant.—It is stated that a party of Eastern capitalists will shortly visit Johnson City to investigate with a view to locating a \$100,000 steel plant. Harry Hargraves can give information.

Knoxville—J. C. Woodwards, M. W. Curry, R. N. Hood and others have incorporated the Southern Land & Loan Association.

Knoxville—Land, &c.—A syndicate of Western parties has purchased 350 acres of land, including the Fountain Head Hotel, for \$162,000. J. S. Van Gilder can give particulars.

Knoxville—Woodworking Factory.—It is reported that the Phenix Manufacturing Co., of Boston, Mass., has purchased a site and will transfer its woodenware factory to Knoxville.

Knoxville—Land.—The Kentucky syndicate, mentioned last week as having purchased the Beaman lake property, is composed of W. S. Miller and J. P. Sandifer, of Lancaster, and W. A. Wilson, of Harrodsburg, and others. They propose making extensive improvements.

Knoxville—Land.—The North Knoxville Land Co. has been incorporated with P. J. Briscoe, president; W. L. Trent, secretary, and W. S. Shields, treasurer. It has purchased the Ludlow farm and will lay it off in town lots. The capital stock is \$60,000.

Knoxville—Tobacco Factory.—It is reported that another tobacco factory will be started.

Knoxville—Printing Office.—S. B. Newman & Co. have leased a five-story building for their printing office, will remove to same and put in new machinery.

Knoxville—Planing Mill.—The East Tennessee Lumber Co., lately reported as incorporated to operate planing mill, etc., succeeds Frank Hughes.

Knoxville—Flour and Saw Mills.—The Knox County Union Roller Mill Co. has been, it is re-

ported, incorporated by the Farmers' Alliance to erect flour and saw mills.

Lascassas—Silver Mine.—The Woodbury Mining Co., of Woodbury, is developing the silver mine near Lascassas, mentioned in last issue.

Lewisburg—Machine Shop and Woodworking Factory.—It is reported that a machine shop and a woodworking factory will be erected.

Linden—Saw Mill.—W. C. Webb will put some new machinery in his saw mill.

London—Caning Factory.—J. L. Hendricks, of Chamber of Commerce Building, Cincinnati, Ohio, contemplated erecting the canning factory mentioned in last issue.

McMinnville—Woolen Mills.—B. J. Tarver is president; Robert Cantrell, vice-president and B. P. Cantrell, secretary, of the Tennessee Woolen Mills, lately reported as incorporated. The capital stock is \$35,000.

Memphis—Electric-light Plant.—The Thomson-Houston Electric Light Co. and the Brush Electric Light Co. have consolidated, thereby increasing their capital stock to \$300,000, and will erect the power-house mentioned in last issue to furnish power to the street railways.

Memphis—Chair Factory.—A chair factory will probably be started. The secretary of the Commercial Association can give information.

Memphis—Firearms Supply Works.—It is reported that the Southern Arms & Cartridge Co. contemplates locating firearms supply works.

Memphis—Tobacco Factory.—H. C. Porter, of Newbern, reported in last issue as to move his tobacco factory to Memphis, has, it is stated, purchased a site, and will erect factory to employ about 100 hands.

Memphis—New Factories.—The Commercial Association is in correspondence with parties who contemplate moving to Memphis boiler and engine works, buggy factory and a paper mill.

Morristown—Machine Works.—Mr. Blaine, of Dayton, Ohio, will probably start a mowing-machine factory.

Morristown—Water Works.—J. J. French and T. V. Speer have secured a site for a reservoir on the land of J. E. Hodges, and will utilize the water from a spring on the same property.

Mt. Verd—Cotton Mill.—New machinery has been put in the Mt. Verd Cotton Mill.

Nashville—Flour Mill.—The Nashville Mill Co. will increase the capacity of its mill.

Nashville—Levi Dodge, W. R. Dodge, J. M. Dickinson and others have incorporated the Levi Dodge Lumber Co.

Rockford—Cotton Mill.—The Rockford Cotton Mills, previously mentioned as organized, has a capital stock of \$150,000 and will put in new machinery, as stated.

Rockwood—Ice Factory.—It is reported that a company is being organized to erect an ice factory.

Rockwood—Electric-light Plant.—It is rumored that the Roane Iron Co. will erect an electric-light plant.

Rockwood—Water Works, &c.—The Cardiff Coal & Iron Co. is the name of the company recently reported as securing \$5,000,000 of foreign capital to build a new town. It contemplates, it is stated, building, in addition to the industries mentioned, water works to cost \$75,000, ice factory and coke plant; also erecting an electric-light plant.

Spring City—Land.—It is reported that Judge Hughes and Wilson & Curry, of Harrodsburg, Ky., have purchased about 10,000 acres of land at Spring City and will build a town and develop mineral lands.

Trenton—Ice Factory.—The erection of an ice factory is probable. L. W. Smith is interested.

Trenton—Foundry and Machine Shop.—Work will soon begin on the Trenton Foundry & Machine Shop, lately mentioned.\*

Wayne County—Land.—It is reported that F. De Witt Smith, of Columbia, has sold to a Northern company 1,000 acres of mineral lands.

#### TEXAS.

Atlanta—Iron Furnace.—It is reported that a bonus has been raised to secure the building of a 70-ton iron furnace.

Austin—Mining.—The Cacochillas District Gold & Silver Mining Co. has been incorporated by R. Ornelas, Felix Gilbert, C. W. Ogden and others, with a capital stock of \$100,000.

Ballinger—Planing Mill.—It is probable that a planing mill will be erected.

Beeville—Grist Mill and Gin.—The erection of a grist mill and cotton gin is agitated.

Bells—Cotton and Woolen Mill.—An Eastern company is investigating with a view to erecting a cotton and woolen mill in Bells.

Belton—Electric-light Plant.—D. A. Chamberlin, M. V. Smith and Ida Bryan have incorporated the Belton Electric Light Co. with a capital stock of \$200,000.

Brownwood—Flour Mill.—A flour mill is being erected. M. Mullins can give particulars.

Brownwood—Canning Factory.—Efforts are being made to organize a stock company to erect a canning factory. M. Mullins can give information.

## MANUFACTURERS' RECORD.

Burnet—Telegraph Lines.—F. H. Holloway has purchased, it is reported, the Erie telegraph system for \$25,000, and will probably construct a line from Burnet to Mason.

Burnet County—Stamp Mill, &c.—Richard Wooley, Jr., W. G. Conover and C. H. Gage are developing a gold mine and will, it is stated, erect a stamp mill.

Cameron—Ice Factory.—S. Wohleb will start the ice factory lately mentioned.

Corsicana—Oil Mill.—The Farmers' Alliance will consider the erection of a cotton-seed oil mill.

Dallas—Box Factory.—The establishment of a box factory is contemplated.

Dallas—Woolen Mill.—A proposition has been received by the Board of Trade for the erection of a woolen mill in Dallas.

Dallas—Furniture Factory.—Alderman Wenckelken is reported as arranging for the establishment of a furniture factory by a Northern company.

Dallas—Oilcloth Factory.—It is reported that an oilcloth factory will be started.

Dallas—Water Works.—An ordinance will probably be introduced in the city council to issue \$150,000 of water works bonds. The mayor can give information.

Dallas—Cotton Compress.—J. F. Fredd, of Macon, Ga., will probably organize a company to erect a cotton compress.

Dallas—Sewerage System.—W. B. Brush, of Austin, has received contract to lay 8-inch sewer pipes on McKinney avenue.

Dallas—Water Works.—Laing & Smoot have received contract for completing McRae, Lally & Co.'s contract on the water works previously mentioned. The cost will be about \$25,000.

El Paso—Artesian Well.—The city clerk will receive proposals until April 18 for the sinking of an artesian well.

Floresville—Cotton Ginnery.—Mr. William Kroeger has, it is reported, contracted for the erection of a \$30,000 cotton ginnery.

Fort Worth Land.—J. C. Avery, of New York city; S. B. Carter, of Newburyport, Mass., and others previously reported as purchasing land near Fort Worth, have incorporated the Fort Worth Land Co. with a capital stock of \$1,000,000.

Fort Worth.—The Thorn Type-setting Machine Co. has been organized with T. J. Hurley, president; E. G. Senter, vice-president, and J. M. Connor, secretary. Capital stock is to be \$200,000.

Fort Worth—Bottling Works.—Casey & Steinfeldt will erect bottling works.

Fort Worth—Paint Factory.—The Huffman Paint Co. has established the paint factory as lately stated.

Fort Worth—Feed Mill.—R. E. Maddox will erect machinery on his stock farm for preparing feed.

Fort Worth—Furniture Factory.—J. W. Lawson & Co., of Wichita, Kans., will, it is reported, move their folding furniture factory to Fort Worth.

Fort Worth.—The West Texas Town Lot Co. has amended its charter, increasing capital stock to \$100,000.

Franklin—Bridges.—G. B. Dunn wants bids for the construction of a wooden bridge, 240 feet long, and another, 100 feet long.

Gainesville—Flour Mill.—The Brady Mill & Elevator Co., reported in last issue as incorporated, purchased the Brady Roller Mills.

Galveston—Gold Mining.—The Mammoth Gold Mining Co. has been incorporated by J. Moller, T. H. Sweeney, R. L. Hellin and others. The capital stock is \$150,000.

Galveston—Pants Factory, &c.—Miller Bros. will start the manufacture of jean pants and furnishing goods.

Greenville—Oil Mill.—A. T. Schmidt & Co., of Philadelphia, contemplate, it is stated, building the cotton seed oil mill lately mentioned.

Greenville—Ice Factory.—The Greenville Ice Co. is erecting the ice factory recently mentioned.

Greenville—Brick-yard.—J. J. Willman will operate the brick-yard lately reported as to be started.

Greenville—Oil Mill and Refinery.—A stock company will, it is stated, be formed to erect the cotton-seed oil mill lately mentioned and a refinery at a total cost of \$40,000.

Henderson—Saw and Grist Mill.—J. H. Jones is reported as contemplating the erection of a saw and grist mill.

Jefferson—Iron Mines.—James Cooper, of Fort Worth, has received contract to furnish the Lone Star Iron Co. with iron ore.

Jefferson—Dry-kiln.—Clarks, Brice & Collomer are rebuilding their dry-kiln, mentioned in last issue as burned.

Laredo—Woolen Mill.—G. B. Ward, of Monticello, Ind., has organized the Ward Manufacturing Co. to erect the woolen mill previously mentioned. The main building will be two stories, 50x80 feet.

Laredo—Sash, Door and Blind Factory.—It is stated that G. B. Ward, D. McGuire and Thomas Raywood will erect a sash, door and blind factory.

Luling—Water Works.—The city has, it is reported, contracted with a Luling company for the erection of the water works lately mentioned.

Luling—Water Works.—F. C. Cross, city secretary, will receive proposals until April 14th for the construction of water works, lately mentioned.

Marble Falls—Brick-yard.—Kleymeyer & Klute, of Henderson, Ky., write that they contemplate establishing the brick-yard mentioned in last issue.

New Braunfels—Electric Plant.—Peter Faust & Co. will put an electric plant in their flour mill, lately mentioned.\*

Park—Saw Mill.—J. M. McGill will probably erect a saw mill.

Rockdale—Electric light, Ice and Water Works. It is reported that a company has been organized to erect electric light plant, ice factory and water works.

Rockport—Refrigerator.—The erection of a refrigerating plant is being agitated.

San Antonio—Machine Shop.—George Holmgreen & Sons contemplate erecting a new machine shop.

San Antonio—Paper Mill.—I. P. Smith, of Holyoke, Mass., representing Eastern capitalists, is investigating with a view to establishing a \$125,000 paper mill.

Sherman—Bridges.—J. P. Austin will receive bids until April 15 for the construction of one iron and five combination bridges.

Sherman—Steel and Iron Works.—An Ohio company will, it is reported, establish branch steel and iron works.

Sherman—Engine Works and Foundry.—Negotiations are pending for the removal of the plant of the Duvall Engine & Foundry Co. from Zanesville, Ohio, to Sherman.

Sulphur Springs—Iron Foundry.—G. B. Boomer will probably erect an iron foundry.

Tyler—Brick and Tile Works.—F. L. De Shong and Charles Moore will start brick and tile works and have purchased nearly all of machinery.\*

Vernon—Electric-light Plant, Water Works, &c.—The \$60,000 company mentioned last week as to erect electric-light plant, build water works and an ice factory, has been incorporated as the Vernon Ice, Light & Water Co. by D. A. Turner, Joseph Schmidt, L. C. Heare and others.

Waco—Paper Mill.—It is reported that a paper mill will be established.

Waco.—The Travis Town Site Co. has been incorporated by T. F. Jones, W. T. Woodward, Thomas Tinsley and others with a capital stock of \$50,000.

Waco—Woolen Mill.—The Slayden-Kerksey Woolen Mills, lately mentioned, has increased capital stock to \$400,000, and will put in 100 additional sewing machines and other machinery.

Waco.—The Provident Investment Co. has been incorporated by Shephard Hemans, R. B. Parrott, Bart Moore and others with a capital stock of \$100,000.

Waco—J. J. Moore, A. Symes and Eugene Williams have incorporated the Artesian Water-power Co. with a capital stock of \$30,000.

### VIRGINIA.

Abingdon—Land.—The Abingdon Development Co. has been organized with G. W. Palmer, of Saltville, president; F. B. Hunt, vice-president; R. M. Page, treasurer; W. F. Smyth, secretary. It has purchased 363 acres of land in and near Abingdon at \$150,000, and will develop.

Basic City—Car Works.—The Basic City Mfg. Manufacturing & Land Co. has, it is reported, closed contract for building the car works reported in last issue with a company headed by Decatur Axtell.

Berkley—Electric-light Plant.—The erection of an electric-light plant is contemplated. J. E. Hozier can give information.

Berkley—Machine Shop.—Charles Colona is building a machine shop at his ship-yard.

Berkley—Brick-yard.—F. H. Pendleton will start a brick-yard.

Berkley—Furniture Factory.—A Baltimore (Md.) party has decided, it is reported, to remove his furniture factory to Berkley.

Big Stone Gap—Iron Furnace.—E. C. Dailey, of Pittsburgh, Pa., is reported as investigating with a view to locating a 150-ton iron furnace.

Buchanan—Land.—The Buchanan Land & Improvement Co. has been organized with F. B. Kemp, president; E. J. Brugh, of Fincastle, vice-president; E. J. McCullough, of Fincastle, treasurer; F. B. Ludwig, secretary, to purchase and improve 700 acres of land, near Buchanan. The capital stock is to be not less than \$100,000 nor more than \$300,000.

Buchanan—Land.—The Central City Improvement Co. is the name of the company, reported in last issue as organized by Edward Dillon and others to purchase 3,000 acres of land. It proposes to expend between \$600,000 and \$800,000 in securing the location of industrial enterprises. The capital stock of the company is \$1,500,000.

Lynchburg—Stove Works.—It is reported that a party from Ironton, O., will establish stove works in Lynchburg. W. W. Flanagan can give information.

Lynchburg—New Factories.—A shoe factory and an overall factory, it is reported, will be established. The West Lynchburg Land Co. can give particulars.

Buena Vista—Power Plant.—C. H. Jordan & Co. propose to organize a \$50,000 stock company to be known as the Buena Vista Power Distributing Co., to erect a "bee-hive" power plant, to be three stories, 400x150 feet.

Buena Vista—Slate Quarry.—A stock company is being organized to develop slate quarries. The Buena Vista Co. can give information.

Buena Vista—Fire-brick Works.—A company has been organized, it is stated, to establish works for the manufacture of fire-brick. The capital stock is \$100,000. The Buena Vista Co. can give information.

Carroll County—Lumbering.—A Canadian syndicate is reported as purchasing \$45,000 of standing timber, and to develop.

Charlottesville—Land.—The Charlottesville West End Land Co. has been organized with C. H. Harman, president; J. L. Cochran, vice-president; T. W. Bailey, treasurer; J. C. McKennie, secretary, to develop the Preston farm, mentioned in last issue as purchased by Payne & Massie. The authorized capital stock is \$250,000.

Charlottesville—Ice Factory.—The Charlottesville Ice Factory is being enlarged.

Covington.—Hon. R. L. Parrish is president, and J. J. Hobbs, secretary and treasurer, of the Covington Improvement Co., reported in last issue, as chartered. The capital stock is \$100,000.

Dinwiddie C. H.—Granite Quarry.—The Petersburg Granite Quarrying Co. will develop at once the granite quarry mentioned in last issue.\*

Elmeria—Land.—G. C. Marshall, of Uniontown, Pa.; G. C. Teaford and others, of Rockbridge and Augusta counties, have organized a company to purchase the Hannah Edmondson farm, 367 acres, of J. D. Crist, at \$22,500, near New Vista.

Franklin—Tile Works.—Williams & Jackson expect this season to add to their brick works already mentioned machinery for the manufacture of drain tile.

Goshen Bridge—Land, etc.—C. L. Cooke, of Staunton, representing Staunton and New York city parties, has optioned, it is reported, 2,000 acres of land in and around Goshen Bridge, to the amount of \$60,000. It is their intention to lay out a town, and among other industries establish a rolling mill.

Graham—Land.—A Big Stone Gap company has purchased, it is reported, 200 acres of land at \$25 per acre at Graham.

Lexington—Sash, Door and Blind Factory.—W. A. Chesterman is president and general manager of the Glasgow Manufacturing Co., reported in last issue as organized to manufacture sash, doors and blinds at Glasgow. It will commence the erection of factory at once.

Lexington—Iron Furnaces.—The Glenwood Furnace Co. is making arrangements to build the two iron furnaces at Glasgow lately mentioned. Capacity is to be 100 tons per day each. The company will obtain its supplies of limestone and ore from the properties of the Rockbridge Co.

Lexington—Iron Mines, etc.—The Rockbridge Co., reported in last issue as buying mineral and timber land, purchased the Glenwood estate, adjoining Glasgow, containing 27,000 acres of iron, manganese and other minerals; also timber lands, and will develop.

Lexington—Water Works.—The construction of the water works at Glasgow, lately mentioned, has commenced. M. M. Martin can give particulars.

Lexington—Ferro-Manganese Furnace, etc.—The Glasgow Manganese & Mineral Co., mentioned in last issue as organized, controls large tracts of iron and manganese lands, and proposes to erect at Glasgow a ferro-manganese and spiegel iron furnace; also a manganese mill. The authorized capital stock is \$2,000,000.

Lexington—Plaster Mill.—John Quisenberry is reported as erecting a plaster mill.

Lexington—Land.—It is reported that options have been taken on the farms of A. D. Campbell and W. B. Leech, near Glasgow, at \$55,000 each and that joint stock companies are being organized for the purchase of the same.

Liberty—Ice Factory.—A company has been formed to establish an ice factory and let contract for machinery to the Richmond Ice Machine Co., of Richmond.

Liberty—New Industries.—It is reported that a match factory, a boot and shoe factory, a soap factory, a sash, door and blind factory, a steam tannery, a steam laundry and harness and saddle establishment, will be located in Bedford City. The Bedford City Industrial & Development Co. can furnish information.

Liberty—Land.—The Fairmount Improvement Co. has been organized to develop lands on the eastern suburb of Bedford City. The capital stock is \$50,000.

Lynchburg—Stove Works.—It is reported that a party from Ironton, O., will establish stove works in Lynchburg. W. W. Flanagan can give information.

Lynchburg—New Factories.—A shoe factory and an overall factory, it is reported, will be established. The West Lynchburg Land Co. can give particulars.

Lynchburg—Machine Works.—The Glamorgan Co., mentioned in last issue, will put in its machine works engine lathes, drill presses shapers and probably other machinery.\*

Lynchburg—Zinc Mine.—The Washington Zinc Co., lately mentioned, is not opening another mine, but is developing a new vein of ore at its mines in Botetourt county.

Lynchburg—Steel Plant.—The corporators of the Midland, Virginia, Steel & Iron Co., lately mentioned (under Richmond), include Hon. John W. Daniel, John H. Inman, of New York City, M. Rogers of Roanoke and others. It organized to manufacture Bessemer steel. The capital stock is to be not less than \$100,000, nor more than \$50,000.

Milnes.—The officers of the Shenandoah Mining & Land Improvement Co., recently reported as organized, are J. S. Hamsberger, president; J. S. Grayson, secretary; Howard Winston, treasurer.

New Market—Land.—A. S. Miller, Israel Allen, Perry Funkhouser and others have purchased the J. B. Strayer property for \$29,124.50.

Norfolk—Yeast Powder Factory.—The Virginia Chemical Works, manufacturing yeast powder, has purchased the old Academy building of T. J. Barlow at \$2,500, and will fit up the same as an yeast powder factory.

Norfolk—Piano Factory.—A piano factory will probably be erected.

Norfolk—Shoe Factory.—Philadelphia (Pa.) parties are prospecting, it is reported, with a view to locating a shoe factory at Norfolk.

Norfolk—Rolling Mill.—Pennsylvania parties are reported as contemplating the establishment of a rolling mill at Norfolk.

Norfolk—Car Shops.—The Norfolk & Southern Railroad Co. is putting in machinery to manufacture cars at its shops.

Norfolk—Ice Factory.—An ice factory will be established it is reported.

Radford—Land.—The Radford West End Land Co. has been organized by Philadelphia (Pa.) and Radford (Va.) parties to purchase 300 acres of land west of Radford, and will develop.

Radford—Electric-light Plant.—The Central City Electric & Gas Light Co., lately reported as incorporated, has been organized with S. Heth, president, and S. W. Burton, secretary, to erect and operate an electric-light plant.

Richmond—Machine Shop.—The Chesapeake & Ohio Railroad Co. (office, Richmond) is putting machinery in its new machine shop, previously reported.

Richmond—Fertilizer Factory.—The Durham Fertilizer Co. will likely rebuild in the summer its factory recently burned.

Roanoke.—The Oriental Cigarette Machine Co. has been incorporated with William Lunsford, president; J. S. Simmons, vice-president; J. W. Shields, secretary and treasurer, to operate the Luddington cigarette machine in Asia, Africa, Japan and Turkey.

Roanoke—Land.—The Inter-Urban Land Co. has been organized with Hon. J. W. Daniel, of Lynchburg, president. It has purchased the Pitzer farm, located between Roanoke and Salem, at \$11,000, and will develop.

Roanoke—Coal Mines, etc.—The Indian Creek Coal & Coke Co. has been organized with H. H. Henry, of Tazewell county, president; Holmes Conrad, of Winchester, vice-president; J. C. Ott, secretary and treasurer, to purchase and develop 7,500 acres of coal and mineral lands on Indian creek, Tazewell county.

Roanoke—Land, etc.—The Crystal Spring Land Co. has been organized, and has purchased a tract of land in South Roanoke at the foot of Mill Mountain, and will lay off into lots and otherwise improve.

Rocky Mount—Mineral Lands.—It is reported that options have been taken on mineral lands in Franklin county.

Rocky Mount—Iron Furnace.—It is reported that an iron furnace will be established.

Rocky Mount—Iron Mines.—C. M. Clark, of Philadelphia, Pa., owns the iron mines near Rocky Mount, previously reported as to be reopened and receiving new machinery, and will develop the same to the extent of 100 tons per day.

Salem—Land.—W. M. Nelson and others have organized a stock company to develop 26 acres of land, adjoining the Norfolk & Western Railroad, purchased of N. Hockman at \$6,000. The capital stock is \$100,000.

Salem—Land.—The South Salem Land Co. has been organized with J. T. Crabtree, president; H. C. Stuart, of Elk Garden, vice-president, and A. H. Gibbons, of Marion, secretary. The capital stock is \$300,000. This company is the purchaser of the "Jack" farm, mentioned in last issue.

Salem—Land.—The Steelton Land Co. has purchased 48 acres of land on the south side of the Roanoke river, west of Salem, for \$85,000.

Staunton—Land.—The Staunton Improvement Co. has been organized with M. E. Miller, president; S. M. Yost, vice-president; W. J. Perry, secretary, and W. P. Sams, treasurer, to deal in real estate and secure the location of industries.

It has optioned land surrounding the town and has a capital stock of \$1,500,000.

Waynesboro—Iron Furnace, Pipe Works, etc.—The Crown Hill Splint Coal Co., of West Virginia, has arranged, it is stated, for the location of an iron furnace, pipe works and other industries, near the site of the Baker Spring Depot, at Waynesboro.

Waynesboro—Iron Furnaces, Pipe Works, etc.—The Shenandoah & Kanawha Iron & Coal Co. is arranging, it is reported, for the location of two 100-ton iron furnaces, pipe works and a rolling mill.

Wytheville—Land.—Parties have optioned, it is reported, the Hoilman property and about one mile of land southwest of the western limit of the city at \$6,000. A stock company will be organized to close the option and will probably develop.

Wytheville—Car Coupler.—The Aultman & Taylor Manufacturing Co. has taken an option on the W. G. Collins patent car coupler, and may manufacture the same.

Wytheville—Land.—The Kent Land Co. has been organized with R. E. Withers, president; C. W. Pike, secretary and treasurer. It has purchased a tract known as "Kent's Meadow" and 13 acres of land adjoining, of Mr. Miller.

Wytheville—Woolen Mill.—A movement is on foot to erect a woolen mill. The Wytheville Development Co. can probably give information.

Wytheville—Rolling Mill.—Efforts will be made to build a rolling mill. The Wytheville Development Co. can give information when anything is done.

Wytheville—Carriage Factory.—Foote & Johnson have let contract for the erection of an addition to their carriage factory.

Wytheville—Iron Furnace.—The stock company lately mentioned as to be organized to build an iron furnace, has, it is stated, secured \$125,000 of the required \$200,000. The Wytheville Development Co. can give information.

#### WEST VIRGINIA.

Belmont—Pipe Line.—A 6-inch pipe line will probably be laid from Belmont or Eureka to Pittsburgh.

Charleston—Laundry.—It is reported that the Capital City Laundering Co. has purchased the White Cloud Steam Laundry and will put in new machinery and operate same.

Clarksburg—White Lead Works.—A proposition has been received to locate in Clarksburg the white lead works of the Standard White Lead & Oil Co., of Chicago, Ill.

Clarksburg—Ice Factory.—It is reported that an ice factory will be erected.

Elkhorn—Rock Quarries.—J. A. Huddleston is reported as opening a rock quarry.

Grafton—Lumber Mill.—The office of the Pardee & Curtin Lumber Co., lately reported as incorporated (under Braxton county), is at Grafton. It has let contract for machinery.

Grafton—Oil Wells.—The Little Jim Oil Co. has sunk two oil wells, and is sinking another.

Grafton—Ice Factory.—The company recently mentioned as organized to start an ice factory has been incorporated as the Tygart Valley Ice Co.

Harper's Ferry—Electric-light Plant.—An electric-light plant will probably be erected.

Keyser—Manufacturing.—The Keyser Development Co. has been incorporated with a capital stock of \$100,000 for manufacturing purposes.

Morgantown—Tannic Acid Factory.—It is probable that a tannic acid factory will be established.

Morgantown—Oil Land.—It is reported that Craig & Lowry have purchased the royalty on the oil lands of Moses Core for \$11,000.

New England—Flour Mill.—Pease Bros., previously reported, have leased the Bowman flour mill and improved same.

Nicholas—Land.—The West Virginia Central & Pittsburgh Railroad Co. (office, Baltimore, Md.) has purchased the Caperton lands from Hon. J. N. Camden and Hon. H. G. Davis for \$246,119.

Parkersburg—Sewerage System, etc.—An election will be held April 8th to decide upon the issuance of \$30,000 of bonds for street paving and \$10,000 for sewerage system.

Parkersburg—Pottery.—The Excelsior Pottery will, it is reported, be improved.

Parkersburg—Gas Works.—The gas company is putting in five new retorts at its works.

Point Pleasant—Improvements.—The city has voted the issuance of \$25,000 in bonds for improvements. D. S. Snyder can give information.

Simpson—Coal Mines.—William Booth & W. F. Giles, of Shamokin, Pa., have leased 30 acres of coal land from A. Armstrong, of Grafton, and will develop. They are the parties reported in last issue as to develop coal mines.

Sutton—Improvements.—The city will vote on the issuance of \$20,000 of bonds for street improvements. The mayor can give information.

Terra Alta—Creamery.—A \$1,500 company has, it is reported, been organized to erect the creamery previously mentioned.

Wheeling—Wire Frame Factory.—It is reported that a manufacturer of wire frames at Moundsville will move his plant to Wheeling.

Wheeling—Oil Well.—The Wheeling Development Co., lately mentioned, has let contract to Kinsey & Thompson for sinking an oil well on Boggs run.

Winifred—Coal Mine.—The Winifred Coal Co., lately mentioned, has opened a new mine.

#### BURNED.

Buchanan, Texas.—The planing mill of the Sulphur Lumber Co.; loss about \$15,000.

Catawba County, N. C.—The cotton gin of J. M. Wren; loss, \$4,000.

Clement, Ga.—The commissary and mill office of the Howard Hydraulic Cement Co., of Chattanooga, Tenn.; to be rebuilt at once.

Dallas, Ga.—The Dallas Cotton Mills; loss about \$15,000.

Fayetteville, Tenn.—The saw mill of George Montgomery damaged by a boiler explosion.

Goldsboro, N. C.—Arrington's mill, near Goldsboro. The mill-dam and bridge also destroyed; loss, \$2,000.

Jacksonville, Fla.—The cigar factory of H. M. Fritot.

Jacksonville, Fla.—The store of Henry Lelienthal; loss estimated \$40,000; also dwelling owned by J. E. F. Bowden; loss \$21,000.

Lake Charles, La.—It is reported that the saw mill of the Bradley-Ramsey Lumber Co. has been destroyed by fire at a loss of about \$100,000.

Magnolia, Miss.—The saw mill and cotton gin of S. A. Lowe.

Prosperity, S. C.—The planing and grist mill of D. H. Wheeler; loss, \$1,500.

Satilla Bluff, Ga.—The saw mill of the Hilton & Dodge Lumber Co. damaged by a boiler explosion.

## Building Notes.

Abingdon, Va.—Crook, Horner & Co., of Baltimore, Md., have received contract, referred to last week, for furnishing heating and ventilating apparatus for the U. S. public building. Their bid was \$3,222,18.

Altus, Ark.—Hendrix College, previously reported, will be moved to Conway. Conway offered \$55,000. A. C. Millar, president Hendrix College, can give information.

Arcadia, Fla.—It is said that a building will be erected for the bank mentioned elsewhere in this issue.

Asheville, N. C.—The city intends issuing \$20,000 of bonds to provide for the erection of a city hall and market-house.

Atlanta, Ga.—J. M. High will, it is said, erect a business building to cost \$100,000.

Atlanta, Ga.—McC. Nixon has prepared plans for 12 dwellings to cost \$100,000.

Atlanta, Ga.—Joel Hurt has purchased the capitol building lately mentioned for \$125,500.

Baltimore, Md.—\$35,000 has been appropriated by the city for the erection of an additional building for the Insane Asylum at Bay View.

Bluffton, Ala.—The Methodist Episcopal denomination has decided to locate its seminary at Langdon, 1 mile from Bluffton. A site of 200 acres has been obtained, and it is said that a five-story building 300 feet long, to cost about \$500,000, will be erected. Work is to commence on May 1.

Bonham, Texas.—The Methodist Episcopal South congregation will erect a church 52x84 feet, to cost \$7,000. W. C. Brigham, architect, can give information.

Bristol, Tenn.—Hotel.—The Bristol Land Co. is reported as contemplating the erection of a hotel to be built of stone and brick at a cost of \$100,000.

Bristol, Tenn.—The trustees of Sullivin's College have decided, it is reported, to erect an additional building to cost about \$15,000.

Cement, Ga.—The Howard Hydraulic Cement Co., Chattanooga, Tenn., will rebuild at once its commissary and mill office, lately burned.

Charleston, S. C.—A branch of the Southern Home Building & Loan Association of Atlanta, Ga., has been organized with S. V. Stewart, president, and J. L. Johnston, secretary and treasurer.

Charleston, S. C.—Plans are reported as being prepared for the rebuilding of the Independent "Circular" Church.

Charleston, S. C.—A branch of the Farmers' Saving & Building & Loan Association of Nashville, Tenn., has been organized with James H. Thayer, president, and W. H. Dunkin, secretary.

Chattanooga, Tenn.—Site has been purchased for a church to be erected by the Unitarian congregation.

Chattanooga, Tenn.—Hotel.—C. A. Bedell has commenced work on his hotel lately mentioned. The hotel is to be built of brick, and will be 100 feet in length.

Chattanooga, Tenn.—A. L. De Long is said to contemplate erecting a tower on Missionary Ridge.

Chattanooga, Tenn.—Dr. W. A. Dietrich confirms the report of last week that he will establish a sanitarium at Lookout Mountain.

Chattanooga, Tenn.—Site is reported as having been purchased for the proposed Masonic temple.

Columbus, Ga.—Work will soon commence on the Episcopal church to be erected at a cost of \$40,000.

Corsicana, Texas.—Hotel.—Plans are reported as being prepared for the erection of a hotel building.

Covington, La.—Hotel.—Jules B. Maille can give information concerning the hotel lately reported as being erected at Claiborne.

Dallas, Texas.—J. W. Thompson intends erecting a two-story auditorium frame building to cost \$20,000.

Danville, Va.—C. H. Conrad contemplates erecting a two-story residence, 50x60 feet, to cost \$40,000.

Dayton, Tenn.—O. B. Jenkins will erect a brick building 25x100 feet.

Decatur, Ga.—T. J. Hightower will receive bids for the erection of a jail for DeKalb county.

Durham, N. C.—B. L. Duke will erect a storage warehouse.

Easton, Md.—Hotel.—M. P. Flowers has been awarded contract for erecting the hotel of the Hotel Avon Co., lately mentioned. His bid was \$25,000.

Ellerslie, Ga.—A branch of the Southern Mutual Building & Loan Association of Atlanta has been organized with T. R. Ashford, president.

Fayetteville, Tenn.—A. W. Feeney & Co. have contract for erecting a business block for Toon & Short.

Fort Payne, Ala.—The erection of a warehouse is projected. The Fort Payne Coal & Iron Co. can probably give information.

Fort Worth, Texas.—A. B. Smith intends erecting a residence to cost \$6,000.

Fort Worth, Texas—Hotel.—W. W. Dunn is having plans prepared for an addition to the Mansion Hotel.

Franklin, La.—A branch of the Southern Home Building & Loan Association has been organized with Matthew Bell, president, and R. E. O'Neill, secretary and treasurer.

Galveston, Texas.—The Galveston Land & Improvement Co. may erect dwelling houses shortly. I. B. Porter can give information.

Graham, Va.—Arrangements are said to have been completed for the erection of a store and warehouse to cost \$10,000.

Grand Rivers, Ky.—A building association with \$50,000 capital has been organized.

Greenville, Tenn.—A building and loan association has been organized with R. R. Neyland, president.

Greenville, Tenn.—Hotel.—J. H. Doughty will erect a four-story hotel, previously reported, to be 80x100 feet in size.

Harrison, Tenn.—R. T. Gill, of Knoxville, has prepared plans for a bank building.

Harriman, Tenn.—Townsend & Stone have prepared plans for the erection of an office building for the East Tennessee Land Co.

Hope, Ark.—Hotel.—The Hope Hotel Co. has been chartered with a capital stock of \$50,000 for the purpose of erecting a hotel. Henry Black is president and J. H. Wood, secretary.

Hubbard City, Texas.—The Hubbard City Building & Loan Association has been incorporated with a capital of \$20,000 with H. B. Allen, J. C. Morgan and J. B. McDaniel as incorporators.

Jackson, Tenn.—J. B. Mosby contemplates erecting a large cotton warehouse.

Knoxville, Tenn.—J. H. Hicks intends erecting a block of dwellings to cost \$15,000; J. B. Harrison, West Knoxville, a residence to cost \$6,500; Samuel Warfield, West Knoxville, a residence to cost \$5,000; W. L. McCreary, a residence to cost \$7,000.

Lampasas, Texas.—The Elks Opera-House Co. has been organized with a capital stock of \$10,000 by W. A. Patterson, W. T. League and others, for the purpose of erecting the opera-house lately reported.

Lancaster, S. C.—A branch of the Farmers' Saving & Building & Loan Association of Nashville, Tenn., has been organized with Leroy Springs, president, and T. S. Carter, secretary and treasurer.

Laredo, Texas.—Contract for erecting the Masonic temple previously reported has been let to A. Hairson.

Lexington, Ky.—The Clifton Heights Land Co. has purchased site for the erection of a Christian church to cost \$15,000.

Lexington, Va.—E. N. Boogher has contract for the erection of the Methodist church mentioned last week, his bid being \$12,000.

Lexington, Va.—Hotel.—Plans are being prepared by E. S. Rogers and W. R. Higham, of Richmond, for the hotel lately reported as to be erected at Glasgow by the Rockbridge Co.; cost about \$60,000.

Liberty, Va.—R. Kenna Campbell will, it is stated, erect at Bedford City a residence to cost \$10,000.

Little Rock, Ark.—The Little Rock Cotton Gin Co. contemplates erecting a building.

Louisville, Ky.—Work will, it is reported, be commenced shortly on the freight depot contemplated by the Louisville & Nashville Railroad Co. at a cost of \$100,000.

Luling, Texas.—The Waters-Pierce Oil Co. contemplates the erection of a warehouse.

Macon, Ga.—Hotel.—Henry Horne, I. B. Engle, W. G. Solomon and Isaac Hardeman have been incorporated under the name of the Vineville Inn, with a capital stock of \$100,000, for the purpose of erecting the hotel mentioned last week.

Magnolia, Miss.—A branch of the Southwestern Building & Loan Association of New Orleans, La., has been organized with W. M. Wroten, president.

Maysville, Ky.—The Commercial Club has been organized by W. L. Thomas, J. J. Wood, J. C. Adamson and others; capital stock \$10,000.

Middlesborough, Ky.—Hotel.—The Middlesborough Town Co. states, in reference to the report of last week, that it will immediately enlarge its hotel by an addition of 60 rooms.

Mountain Home, Ark.—The Baxter county courthouse, lately reported as destroyed by fire, will be rebuilt.

Norfolk, Va.—All bids for the erection of the almshouse lately referred to have been rejected, and proposals will be received anew.

Pickens, S. C.—Elias Day, chairman board of county commissioners, will receive proposals until May 1 for the enlarging and repairing of the courthouse. Plans can be seen at county commissioners' office, or at office of E. B. Rutledge, architect, Greenville.

Radford, Va.—The Presbyterians, Episcopalians and Methodists will, it is reported, erect churches.

Richmond, Va.—W. E. Taylor will erect a two-story residence, 40x10 feet, to cost \$11,500.

Roanoke, Va.—The organization of a company with a capital stock of \$50,000 for the purpose of erecting a four-story apartment house is being talked of. E. A. Parsons can give information.

Rockwood, Tenn.—The Cardiff Coal & Iron Co. has plans for the erection of a three-story brick building 75x25 feet.

Rockwood, Tenn.—Contract is said to have been let for the erection of 30 brick blocks at Carroll, a town about 4 miles distant.

Rockwood, Tenn.—The Cardiff Coal & Iron Co., mentioned elsewhere in this issue, guarantees the organization of a building and loan association with a capital stock of \$150,000, the erection of a church to cost \$10,000, and schoolhouse to cost \$15,000.

Rome, Ga.—It is stated that the Chattanooga, Rome & Columbus Railroad Co. and the East Tennessee, Georgia & Georgia Railroad Co. (office, Knoxville, Tenn.) will erect a union depot to cost \$15,000.

Russellville, Ala.—Hotel.—It is stated that a hotel will be erected.

San Antonio, Texas.—R. Winslow will erect a block of stores and offices, 70x75 feet, to cost \$18,500.

San Antonio, Texas.—The Alam Fire Insurance Co. is reported to have purchased site for the erection of a \$100,000 office building.

Savannah, Ga.—A. W. Black will erect a cold-storage warehouse for the Armour Packing Co.

Savannah, Ga.—The Hopkins estate will erect three-story dwellings, 58x76 feet, to cost \$13,500; Tiedemann Bros., a two-story dwellings, 60x83 feet, to cost \$19,000; J. S. Wood, a two story residence, 48x69 feet, to cost \$24,000; plans for all by A. S. Eichberg.

Shreveport, La.—Hotel.—It is said that a party representing an English syndicate has purchased a site on which it is proposed to erect a hotel to cost \$20,000.

Smithville, Ga.—J. L. Jay & Son, of Albany, Ga., have contract for the erection of buildings lately referred to, to be erected by the Central Railroad & Banking Co. of Georgia (office, Savannah) at Eufaula and Smithville.

Springfield, Ky.—Brewer & Batchelor, of Springfield, have contract for erecting an academy at St. Catherines.

Strawn, Texas.—A building and loan association has been organized with J. A. Williams, president, and J. B. Rhen, secretary and treasurer.

Suffolk, Va.—J. A. McKay, of Philadelphia, Pa., contemplates erecting a residence.

Sylacauga, Ala.—Hotel.—McDonald & Campbell are reported as having purchased site for the hotel lately mentioned.

Tredegar (P. O. Jacksonville), Ala.—The Catholics will erect a church shortly.

Tyler, Texas.—A company is reported to have been organized for the purpose of erecting dwelling houses.

Vernon, Texas.—The Commercial Bank will erect a building.

Vicksburg, Miss.—The erection of a new city hall is being agitated.

Washington, D. C.—Ida C. Slater will erect a dwelling to cost \$9,000; Woodward & Lathrop, a six-story building, \$40,000 feet to cost \$60,000—Charles Edmondston has contract; R. H. Warder, a three-story store building—Emmons & King have contract; John Gibson, a dwelling to cost \$10,000—W. H. Williams has contract; Dr. Wm. Daniels, a store and dwelling to cost \$6,000; H. A. Seymour, a three story dwelling to cost \$20,000—John McGregor has contract; Richard Rothwell, 2 dwellings to cost \$6,000; Wm. B. Thompson, a dwelling to cost \$8,000; D. S. Barry, a three-story dwelling to cost \$8,000; G. R. Force, a dwelling; Sydne A. Kent, a dwelling to cost \$30,000; Alexander T. Hoffman, agent for owners, a store and dwelling to cost \$5,000; the National Capital Bank, a bank building to cost \$30,000; George A. Jordan, a building to cost \$10,000—Frank N. Carver has contract; C. C. Martin, a dwelling to cost \$8,000; J. D. McGuire, a block of dwellings; plans have been prepared by Joseph C. Johnston for 4 dwellings to cost \$8,000.

Waycross, Ga.—L. H. Buchanan contemplates the erection of a two-story brick store and office building 55x100 feet in size; cost \$5,000.

Westminster, Md.—Jacob F. Elgen has secured contract for enlarging the Western Maryland College building.

Wheeling, W. Va.—It is said that Joseph Speidel and George K. Wheat will erect a theatre to cost about \$70,000.

Whitesboro, Texas.—A branch of the Southern Home Building & Loan Association of Atlanta, Ga., has been organized with W. H. Marshall, president.

Wytheville, Va.—Hotel.—The Wytheville Land & Improvement Co. will erect the hotel mentioned last week; cost \$25,000.

Wytheville, Va.—A movement is being made to establish an infirmary.

Yazoo City, Miss.—L. Lippman & Co. state that if they can secure bricks and contractors and mechanics they will erect 3 warehouses, several schoolhouses and a number of dwellings.

### Proposed Work of the Georgia Saw Mill Association.

ATLANTA, GA., March 11, 1890.  
*Editor Manufacturers' Record:*

The Georgia Saw Mill Association, which was organized on the 8th of February, held its first regular meeting Saturday, the 8th inst., at the Chamber of Commerce in Atlanta.

The association now comprises nearly all of the larger mills throughout the State. The list of members is as follows: Normandale Lumber Co., Normandale, Ga.; Spencer Bros., Lumber City, Ga.; Gross Lumber Co., Atlanta, Ga.; Empire Lumber Co., Chattanooga, Tenn.; H. P. Smart & Bro., Midville, Ga.; Amoskeag Lumber Co., Amoskeag, Ga.; Foote & Zuber Lumber Co., Atlanta, Ga.; Donovan & Perkins, Wadley, Ga.; A. B. Steele Lumber Co., Atlanta, Ga.; Haunson & Goff, Longview, Ga.; Hosch Lumber Co., Atlanta, Ga.; Enterprise Lumber Co., Atlanta, Ga.; Parrott Lumber Co., Richwood, Ga.; J. S. Betts & Co., Ashburn, Ga.; J. W. Achord and J. H. Ellison.

W. B. Stillwell, of Stillwell, Millen & Co., and M. W. Dixon, of Dale, Dixon & Co., of Savannah, and L. Johnson, of the Waycross Lumber Co., were present and took part in the meeting. On behalf of themselves and their associates in the coast trade, they agreed to meet with the association at its next meeting in Macon on April 22d, and then become members.

At the next meeting a book of inspection, which is now being drafted, will be discussed, detailed and voted upon. This book, when accepted by the association, will take the place of the inspection book issued by the Southern Lumber & Timber Association in Savannah in 1883, and will be the uniform reference to all the South-eastern yellow pine trade, both by rail and coastwise.

Besides inspection, the association will take up at its next meeting the question of weights and schedules of estimates now used by the Georgia Railroad Commission, which are considered incorrect by experienced mill men. The commission will be asked to establish a new schedule to conform to actual test.

At the earliest possible day the association will put into effect a resolution already passed that all contracts for lumber shall be made on a basis of mill prices and mill inspection. That this resolution may be more perfectly enforced, the next legislature, of Georgia, will be asked to pass a general survey law, authorizing licensed and sworn inspectors, whose count and grade shall be final as between buyer and seller. Each mill is expected to have one or more of these inspectors.

The Railroad commission will be appealed to to reduce local rates and grant such other favors as will give the saw mill men advantages such as the magnitude of the business demands.

The foregoing points briefly outline the purposes of the association. Whatever action is taken of interest to the trade at future meetings will be duly reported.

C. J. HADEN, Secy.

### MACHINERY WANTED.

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Boiler.—Cummings & Buffum, Dillsboro, N. C., want a 35 to 50 horse-power stationary boiler.

Boiler.—The Arlington Co., Lenoir, N. C., will purchase a boiler for its hotel.

Boiler, &c.—M. N. Dyer, county commissioner, Mountain Home, Ark., will purchase machinery (boiler, electric-light plant, etc.) for the Baxter county courthouse to be rebuilt.

Boilers.—A. L. Monnot, Jeannerette, La., may want six boilers for his sugar-house.

Bottling Works.—Jones & Miller, Cartersville, Ga., want prices on bottles, siphon filler and syrup gauge, second-hand.

Bottling Works.—T. J. Lilienfield, Charlottesville, Va., may want a bottle washing machine and 200 or 300 gross of bottles.

Brick.—L. Lippman & Co., Yazoo City, Miss., desire to purchase brick for the erection of a number of buildings.

Brick Machines.—P. H. Hanes & Co., Winston, N. C., desire to communicate with manufacturers of standard brick machines.

Brick-yard.—J. P. Bondurant, Marion, N. C., wants machinery for a brick-yard.

Bridges.—J. P. Austin, Sherman, Texas, will receive bids until April 15 for the construction of one iron and five combination bridges.

Can Factory.—"T," care of MANUFACTURERS' RECORD, Baltimore, Md., wants information, cost, etc., of a small plant for manufacturing tin cans.

Canning Factory.—E. D. Huguenin, Macon, Ga., wants prices on machinery for canning factory.

Canning Factory.—W. M. Hazzard, Annandale, S. C., wants catalogues and prices on machinery used in canning oysters; also information regarding the business.

Canning Factory.—M. Moore, 703 Main street, Danville, Va., wants complete outfit of machinery for a canning factory.

Canning Factory.—E. O. Douglas, Florence, S. C., wants complete outfit of machinery for canning factory.

Carding Machine.—Ryan Bros. & Co., Harrison, Ark., want a carding machine.

Cars.—Joseph F. Allison, Cartersville, Ga., wants tram cars.

Cold-storage Plant.—Machinery will be wanted for a cold-storage plant at Chattanooga, Tenn. Address R. H. Evans.

Cotton Ginnery.—The Enterprise Manufacturing Co., Barnwell, S. C., will probably purchase some additional machinery for a cotton ginnery.

Cotton-seed Oil Mill.—The De Kalb County Co-operative Manufacturing Co., Lithonia, Ga., may want machinery for a cotton-seed oil mill.

Creamery.—John C. Earle, Easton, Md., expects to purchase machinery for a creamery.

Crusher.—The Chattanooga Marble & Stone Co., Chattanooga, Tenn., want a stone crusher.

Cupola.—A cupola is wanted for the Trenton (Tenn.) Foundry & Machine Shop. Address L. W. Cursory.

Derrick Cars.—The Petersburg Granite Quarrying Co., Dinwiddie C. H., Va., will want later on derrick cars for moving stone.

Drill Press, etc.—J. R. Cook & Son, Oglethorpe, Ga., will want a 40 or 42 inch drill press with revolving table; also one medium-size iron shear to cut  $\frac{3}{4}$  x 4 or 5 inches.

Electric Plant.—Peter Faust & Co., New Braunfels, Texas, want an electric plant to operate electric motors in day and arc and incandescent lamps at night. Power is to be furnished by turbines.

Electric-light Plant.—The Dardanelle Ice Co., Dardanelle, Ark., contemplates putting in an incandescent electric light plant.

Engine.—Lawson Stapleton, Americus, Ga., intends purchasing an engine.

Excelsior Machinery.—Wise & Co., Selma, Ala., want prices on excelsior machinery.

Fire-brick Machines.—The Cleveland Fire-brick Co., Cleveland, Tenn., wants fire-brick machines that turn out a hard, well-finished brick ready for baking.

Fire Equipment.—Mr. Blanton, Liberty, Va., will probably purchase fire equipment.

Flour Mill and Gin.—Ryan Bros. & Co., Harrison, Ark., will want roller flour machinery and a cotton gin.

Grindstone Factory.—The Chattanooga Marble & Stone Co., Chattanooga, Tenn., wants machinery for making grindstones.

Handle Factory.—Earman & Streets, Tavares, Fla., contemplate putting in axe handle machinery.

Heaters.—D. G. Zeigler, Aiken, S. C., wants prices on heaters for buildings.

Hoisting Engine.—"F," care of MANUFACTURERS' RECORD, Baltimore, Md., wants prices and description of a Lidgerwood hoisting engine.

Ice Factory.—N. P. Renfro, Opelika, Ala., will probably purchase machinery for an ice factory.

Ice Machine.—Lewis Abraham, secretary of the Century Ice Machine Co., 1311 F street, N. W., Washington, D. C., will receive bids for the construction of an ice machine.

Ice Machines.—Fairbanks & Co., 53 Camp street, New Orleans, La., wants the address of manufacturers of ice machines.

Ice Machine.—The Jackson Ice Manufacturing & Machine Co., Jackson, Miss., wants estimates on a 10 or 15-ton ice machine complete.

Iron and Wood Planer, etc.—The Bristol Foundry & Machine Co., Bristol, Tenn., will probably purchase an iron planer and drill, second-hand; also wood planer.

Machine Works.—The Glamorgan Co., Lynchburg, Va., will purchase engine lathes, drill presses, shapers and probably other machinery.

Marble Works.—J. W. Dearing, Glasgow, Ky., contemplates putting a rubbing bed and small saw in his marble works.

Mining Machinery.—Joseph F. Allison, Cartersville, Ga., will purchase iron mining machinery, including ore washer, tools, pumps and 2 miles of 5 or 6-inch pipe.

Oil Mill and Fertilizer Factory.—The Leary Co-operative Cotton-seed Oil & Fertilizer Co. is to be organized at Leary, Ga., and will purchase machinery.

Oil Mill.—B. F. Brimberry, Albany, Ga., will receive bids for machinery for a cotton-seed oil mill.

Oyster Dredges.—William M. Hazzard, Annandale, S. C., desires to correspond with manufacturers of oyster dredges and other machinery used in oystering.

Printing Press.—J. L. King, Bristol, Tenn., wants a printing press about 7x4. "Pearl" press preferred.

Pump and Piping.—The Americus Ice Co., Americus, Ga., wants a No. 2 pump and about 1,000 feet of pipe for cold storage department.

Pump.—J. S. Roland & Son, Rutherfordton, N. C., want a chain elevator pump to draw water by power from a 60-foot well.

Pumps.—F. L. De Shong, Tyler, Texas, wants two 1 horse-power pumps.

Pump.—The Cedar Grove Mining Co., Cedar Grove, W. Va., wants a mine pump with capacity for 2 or 3 lines of  $\frac{1}{2}$  inch pipe, 1,500 feet long, water to be drawn up a grade of 1 foot in 100.

Punch, Shears, etc.—The Western Machine & Fence Co., Henderson, Ky., wants a lever punch for  $\frac{3}{4}$  holes in  $\frac{1}{2}$  steel; also shears and supplies of No. 12 galvanized steel wire.

Rails.—Joseph F. Allison, Cartersville, Ga., wants 8 tons of 16-lb. rails and 25 tons of 56-lb. rails.

Rails.—Westerfield, Taylor & Fornaris, New Orleans, La., want prices on one mile of 20 to 25-pound new or second-hand rails f. o. b. New Orleans.

Roofing.—H. T. McCabe, county judge, Hidalgo county, Hidalgo, Texas, wants prices on corrugated iron, tin and felt roofing for courthouse and other public buildings.

Rope Machinery.—Fairbanks & Co., 53 Camp street, New Orleans, La., wants the address of manufacturers of cotton-rope machinery.

Sash, Door and Blind Factory.—J. W. Stapleton, Cordele, Ga., will purchase machinery for a sash, door and blind factory.

Sash and Door Machinery, etc.—Ross & Co., Eufaula, Ala., will put in sash and door machinery; also planer, re-saw, turning lathe and power or trip hammer.

Saw and Planing Mill, etc.—Ryan Bros. & Co., Harrison, Ark., want machinery for saw and planing mill, including band and circular saws; also sash and door machinery.

Spoke and Hub Factory.—S. A. Torrence, of Walbridge & Co., Buffalo, N. Y., wants catalogues and prices on spoke, hub, rim, etc., machinery.

Stave and Heading Machinery.—W. M. Mitchell, Tonieville, Ky., wants prices on slack-barrel stave and heading machinery.

Steel-armed Cruiser.—Hon. B. F. Tracy, Secretary of the Navy, Washington, D. C., will receive proposals until June 1 for the construction of a steel armored cruiser of about 7,500 tons displacement.

Step Ladders.—Fairbanks & Co., 53 Camp street, New Orleans, La., want the address of manufacturers of step ladders.

Sugar-house.—A. L. Monnot, Jeannerette, La., contemplates putting in his sugar-house two centrifugals and two sugar cars.

Surfacer.—R. R. Moss, Dayton, Tenn., wants prices on a double belt surfacer.

Tenoning Machines.—S. Risinger & Co., Moundsville, W. Va., want a sash-tenoning machine.

Tile Works.—Williams & Jackson, Franklin, Va., will probably purchase machinery for the manufacture of drain tile.

Tobacco Factory.—H. H. Dill, Van Buren, Ark., will probably purchase some machinery for a tobacco factory.

Veneer Machinery.—S. A. Torrence, of Walbridge & Co., Buffalo, N. Y., desires prices on veneer machinery for making butter dishes, fruit and berry packages, etc.

Veneer Machinery.—The Louisville Veneer Mills Co., Louisville, Ky., will probably purchase veneer-cutting machinery and a planer.

Water Works.—F. C. Cross, city secretary, Luling, Texas, will receive proposals until April 14th for the construction of water works.

Water Works.—H. C. Price, Crystal Springs, Miss., wants estimates on the construction of a small system of water works.

Wind Mill.—Dr. E. E. Dixon, Gainesville, Ga., will probably purchase a wind mill.

Wire Mattress Factory.—Campbell & Co., Chattanooga, Tenn., want machinery for the manufacture of wire mattresses and bed springs.

Woodworking Machinery.—Lawson Stapleton, Americus, Ga., intends purchasing a planer, helve lathe, spoke, hub and name machinery.

Woodworking Machinery, etc.—The Greeneville Box Factory & Planing Mills, Greeneville, Tenn., is securing prices on a drum and die sander, band resawing machine and a 10 horse-power automatic engine.

### The Compound Lard Bill.

The bill to tax "compound lard," better described as the bill to restrict the sale of cotton-seed oil, has been favorably reported to the House by the committee on agriculture.

The committee seems to have given small heed to the protest that came from the South against this unjust measure, but the fight must not be given up on that account.

The fact is the South has not yet made the vigorous opposition to the passage of the bill that it should make. Petitions against it should be sent from every county in the cotton belt and cotton exchanges of all the towns and cities should pass resolutions opposing it.

The bill would discriminate against a very important product of the South, and for that reason entail a heavy loss on Southern farmers. The colored people would be among the greatest sufferers. They probably have more weight and influence with the present Congress than the whites, and they should exert themselves to make that influence felt against the bill.

No time is to be lost, as the bill is now regularly before the House, with a strong backing in that body and a strong lobby of Western lard producers to urge its passage. Birmingham (Ala.) Age-Herald.

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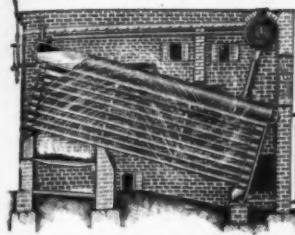
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**WANTED COTTON MILL HELP.**—Experienced Weavers, Spinners and Cotton Mill Operatives in a new town in Arkansas. Splendid climate, modern mill; fair wages. Families especially desired. Write to R. GREER, V. P. Calumet Cotton Factory, Mammoth Spring, Ark. Fort Payne, Ala.

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In the Lake regions of Wisconsin, Minnesota, Iowa and the two Dakotas, there are hundreds of charming localities pre-eminently fitted for summer homes. Among the following selected list are names familiar to many of our readers as the perfection of Northern summer resorts. Nearly all of the Wisconsin points of interest are within a short distance from Chicago or Milwaukee, and none of them are so far away from the "buy" marts of civilization" that they cannot be reached in a few hours of travel, by frequent trains, over the finest road in the Northwest—the Chicago, Milwaukee & St. Paul Railway:

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Minocqua, Wis. Spirit Lake, Iowa.  
Waukesha, Wis. Frontenac, Minn.  
Palmyra, Wis. Lake Minnetonka, Minn.  
Tomahawk Lakes, Wis.  
Lakeside, Wis. Orionville, Minn.  
Kilbourn City, Wis. Prior Lake, Minn.  
(Dells of the Wisconsin.) White Bear Lake, Minn.  
Beaver Dam, Wis. Big Stone Lake, Dakota.  
Madison, Wis.

Stearns leave daily (except Sunday) Union Dock 6:30 P. M., Canton Wharf 7 P. M.; arrives Old Point Comfort 7 A. M., at Norfolk at 8 A. M., Portsmouth, N. H. 15 A. M. At OLD POINT COMFORT connect with CHESAPEAKE & OHIO RAILROAD for Richmond, Charlottesville, Greenbrier, White Sulphur Springs, Lanesville, Cincinnati and all points West. At NORFOLK with NORFOLK & WESTERN RAILROAD for Petersburg, Richmond, Lynchburg, Roanoke, Bristol, Knoxville, Chattanooga, Memphis and the Southwest; also with the NORFOLK SOUTHERN RAILROAD for Elizabeth City, Edenton and Eastern North Carolina. At PORTSMOUTH, VA., with SEABOARD & ROANOKE RAILROAD for Weldon, Raleigh, Southern Pines, Charlotte, Fayetteville, New Bern, Wilmington, Charleston, Columbia, Augusta, Savannah, Jacksonville and all PRINCIPAL SOUTHERN CITIES.

For detailed information, apply to any coupon ticket agent, or send stamp for a free illustrated guide book, entitled "Cool Retreats." Address A. V. H. Carpenter, General Passenger Agent, Milwaukee, Wis.

## PROPOSALS.

PROPOSALS for building Water Works in Winchester, Ky., will be received until April 10th. Winchester is a town of 8,000 inhabitants. Full particulars can be obtained from P. P. Pendleton, Mayor.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M., on the 8th day of April, 1890, for all the labor and materials required to complete the approaches to the U. S. Postoffice, &c., building at St. Joseph, Mo., in accordance with specification and drawing, copies of which may be had on application at this office or the office of the superintendent. Each bid must be accompanied by certified check for \$500. The Department will reject all bids received after the time fixed for opening the same, also bids which do not comply strictly with all the requirements of this invitation. JAS. H. WINDRIM, Supervising Architect. March 12th, 1890.

PROPOSALS FOR SUPPLIES FOR THE POSTOFFICE DEPARTMENT AND POSTAL SERVICE.

POSTOFFICE DEPARTMENT, WASHINGTON, D. C., March 12, 1890. SEALED PROPOSALS will be received at this Department until Saturday, the 12th of April, 1890, at 12 o'clock noon, for furnishing wrapping paper, wrapping paper for facing-slip, twine, letter scales, postmarking and rating stamps, rubber stamps, canceling ink, pads, paper, envelopes, rubber goods, pens, pen-holders, pencils, inks, mucilage, glass goods, rulers, folders, articles of steel, rubber erasers, books, typewriter supplies, and miscellaneous stationery in such quantities of the different articles, respectively, and at such times and from time to time, as they may be ordered, during the fiscal year beginning July 1, 1890, and ending June 30, 1891, for the use of any branch of the department or postal service.

Banks for proposals, with specifications giving detailed statement of the requirements, to be met in respect to each article, and also the estimated quantities probably to be required of each, and giving full instructions as to the manner of bidding and conditions to be observed by bidders, will be furnished on application to the Superintendent of the Division of Postoffice Supplies, Postoffice Department, Washington, D. C.

The Postmaster General reserves the right to reject any or all bids, to waive technical defects, and to accept any part of any bid and reject the other part.

JOHN WANAMAKER,  
Postmaster General.

## Notice to Contractors.

Sealed bids for the erection of a brick and stone Courthouse for Caddo Parish, Shreveport, La., will be received from March 1 to March 31, 1890. Plans and specifications can be seen in office of Weathers & Weathers, Architects, Spring street, Shreveport, La. The right to reject any or all bids will be reserved. A good bond will be required. J. M. FOSTER,  
President Police Jury.  
Committee: J. M. Foster, Chairman; P. Youree, William F. Taylor, J. R. Herndon.

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**FOR SALE.**  
The Manchester Cotton Mill,

Located at Manchester, N. C., on the Cape Fear & Yadkin Valley R. R., 11 miles from Fayetteville, N. C. The mill is fully equipped for making plaids, checks and other colored goods. Is in running order, and could be started up at any time. Has both water and steam power. Building as follows: Dye House, Store, Machine Shop, with lathe and full set of tools, Gin and Gin House, 17 Tenement Houses, and 35 acres land. Has Gas Machine and piping for lighting every part of the mill. Capacity 1,750 spindles and 55 looms. For further particulars, address

THOS. P. BALDWIN, Prest.  
5 & 7 German Street, Baltimore, Md.



**"Eureka" Sand-Papering Machine.**

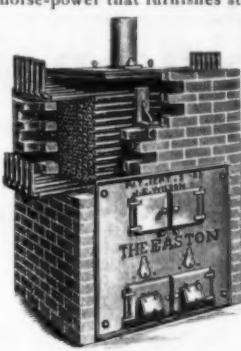
This machine, manufactured by the Winship Manufacturing Co., Racine, Wis., was first introduced in 1875, and is now used in many of the leading woodworking factories of the United States. It is especially adapted for use in the manufacture of furniture, sash, blinds and doors, carriages, wagons and agricultural implements; also for general use in smoothing and polishing all plain surfaces of wood.

The table or bed for holding material to be smoothed is movable endways by the use of a crank wheel, cog pinion and rack, and can be quickly adjusted to any thickness. The upright mandrel, to which the head which carries the sand-paper is attached, turns in adjustable boxes. These boxes are fastened to a crane, which swings over the bed from side to side. By moving a small lever the upper end of the mandrel is tilted right or left, as required, for setting the head to correspond with the grain of the lumber which is being smoothed. The head is not flat, but slightly cone-shaped, and is countersunk two inches diameter in the center, so that when adjusted it does not grind with its entire surface in the

the manufacture of wagon boxes, it is unsurpassed by anything else yet invented for the purpose.

**A New Boiler.**

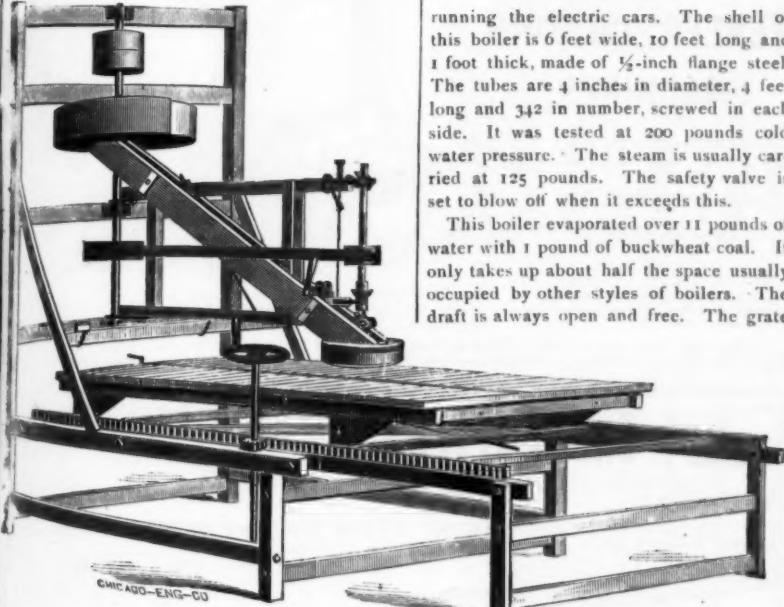
The accompanying cut shows a new boiler lately put on the market by the Easton Boiler Co., of Easton, Pa. Several of these boilers were put in last fall in small sizes for heating dwellings. They can be used for steam or hot water, and they give great satisfaction. The manufacturers also have one at their place of 225 horse-power that furnishes steam for



A NEW BOILER.

running the electric cars. The shell of this boiler is 6 feet wide, 20 feet long and 1 foot thick, made of  $\frac{1}{2}$ -inch flange steel. The tubes are 4 inches in diameter, 4 feet long and 342 in number, screwed in each side. It was tested at 200 pounds cold water pressure. The steam is usually carried at 125 pounds. The safety valve is set to blow off when it exceeds this.

This boiler evaporated over 11 pounds of water with 1 pound of buckwheat coal. It only takes up about half the space usually occupied by other styles of boilers. The draft is always open and free. The grate



"EUREKA" SAND-PAPERING MACHINE.

usual way, but has a cutting action from near the center outward.

The effect of this combination is a marked improvement in the quality and great increase in the quantity of work which may be accomplished by the use of this machine. The power required to run it hardly exceeds one horse-power, and cheap labor may be employed.

The manufacturers claim the following points of superiority:

1. The rapidity and perfection of its work.
2. The nominal amount of power required.

3. The ease with which the head can be adjusted while in motion to smooth with the grain of the wood.

4. The facility with which the bed can be adjusted to any thickness of lumber, from one-half to eight inches.

5. Its simplicity, requiring but little mechanical skill to operate it.

6. The use of rollers, by which warped or bent lumber can be straightened and held in place.

7. The bed for holding the material to be smoothed is both adjustable and movable, so that material of any length or width desired can be worked, depending only on the length and width of the machine used. Each machine is provided with an exhaust fan, which carries away all dust produced by its operation.

For smoothing sash, doors, blinds, and in

surface is 6x8 feet. As heat always expands, there is nothing required to keep the blaze towards the center. It is all heating surface.

This size boiler only takes up a space of 12 feet 3 inches by 8 feet, and the height 14 feet 6 inches.

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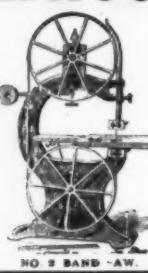
171 & 173 W. SECOND STREET, CINCINNATI, OHIO.



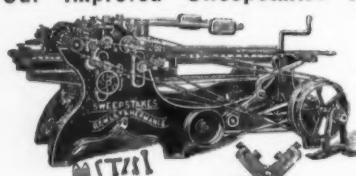
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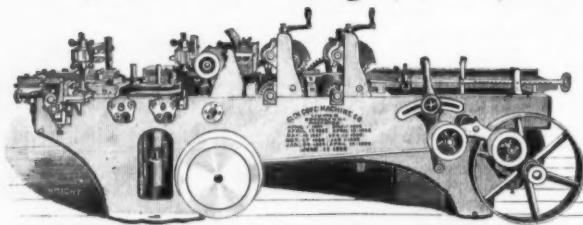
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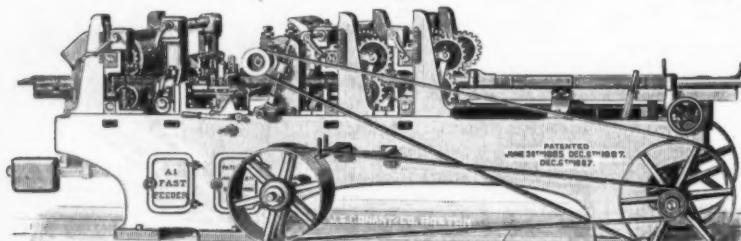


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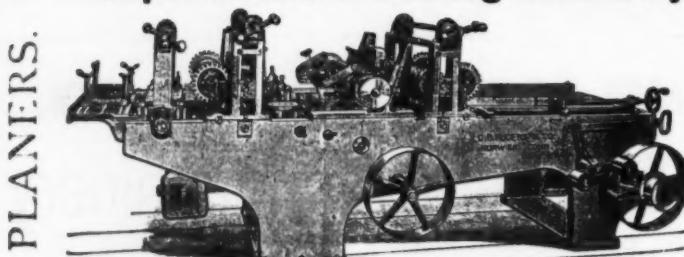


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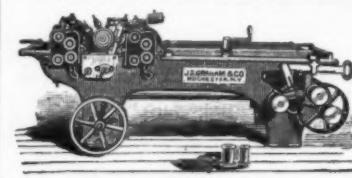
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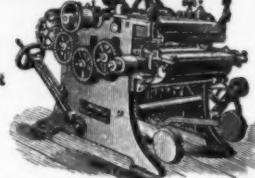
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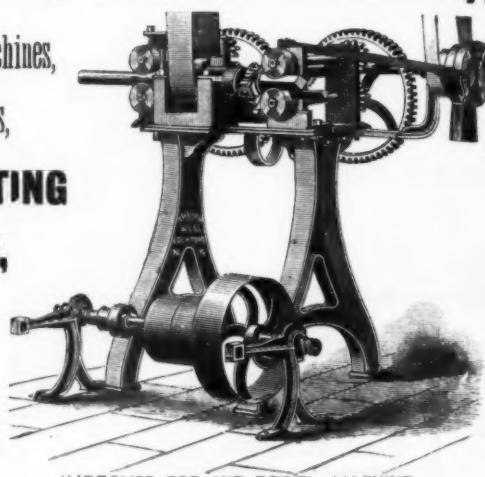
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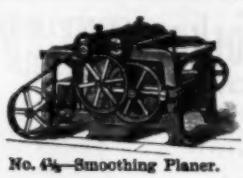
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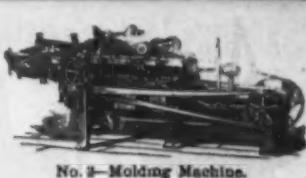
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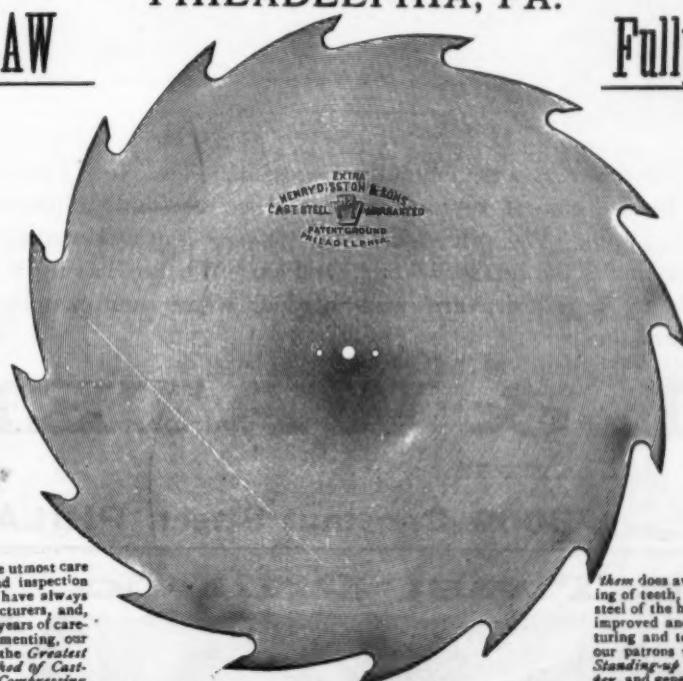


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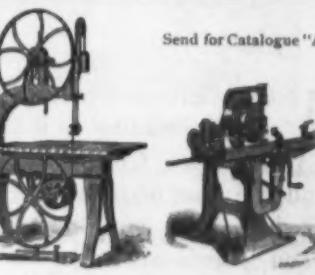
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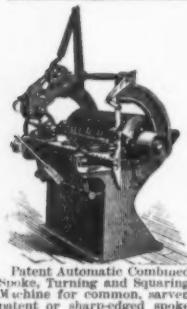
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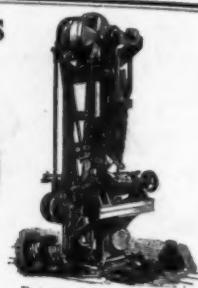
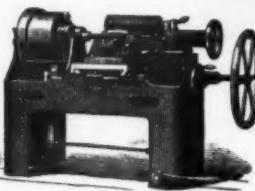
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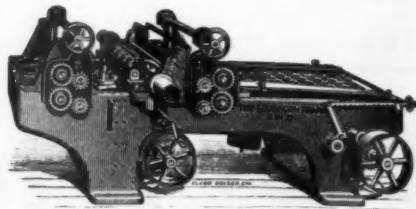
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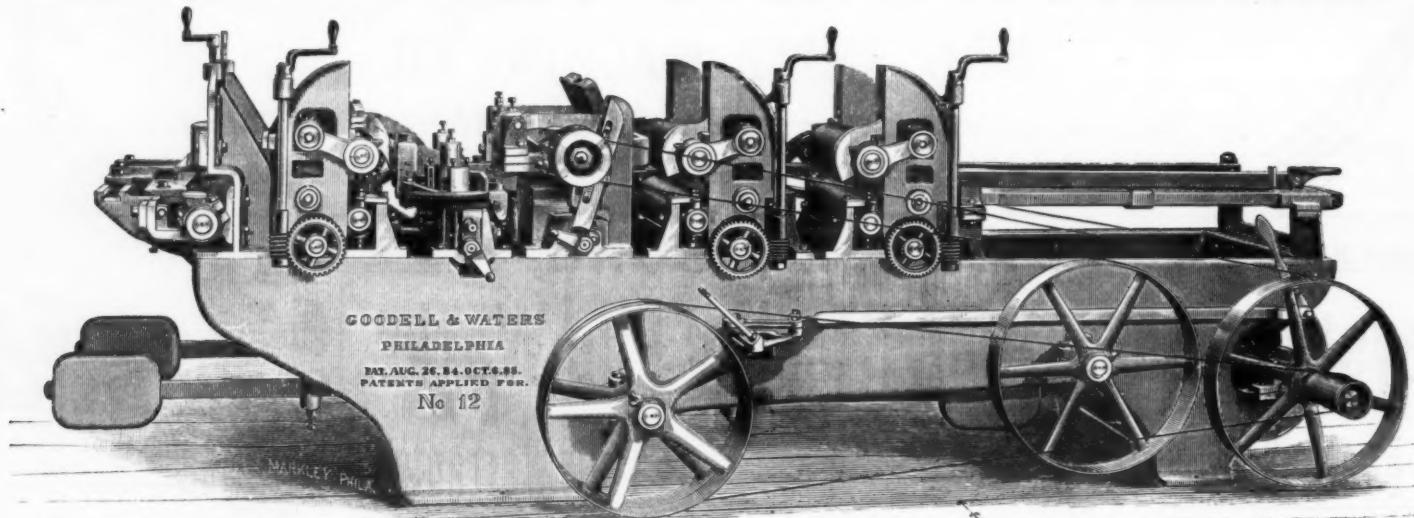
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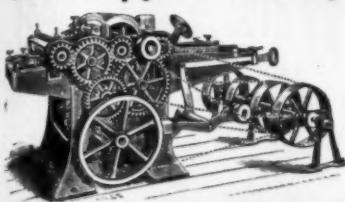
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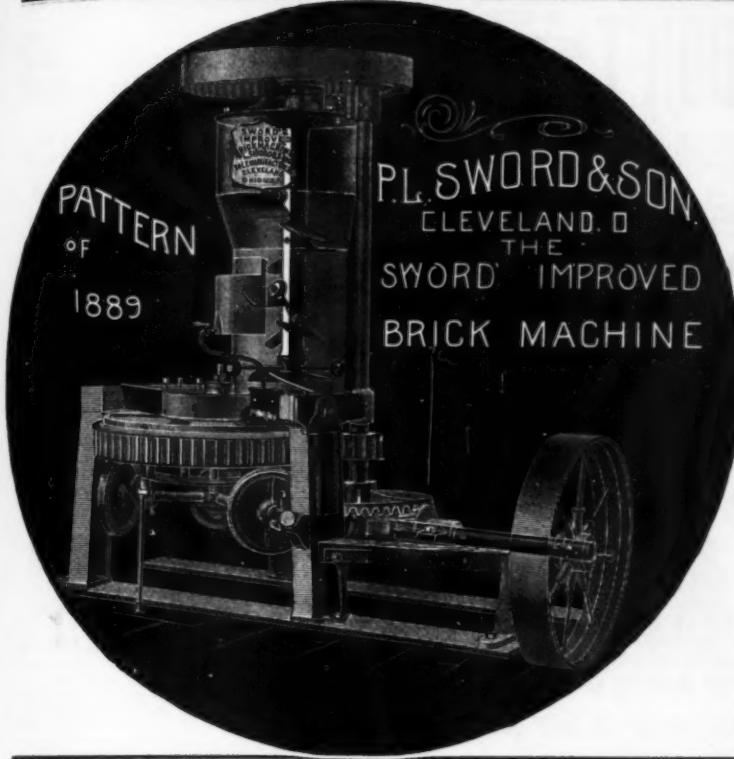


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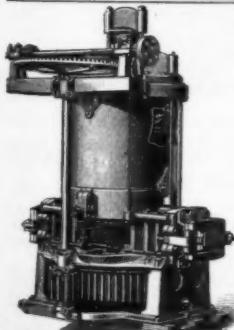
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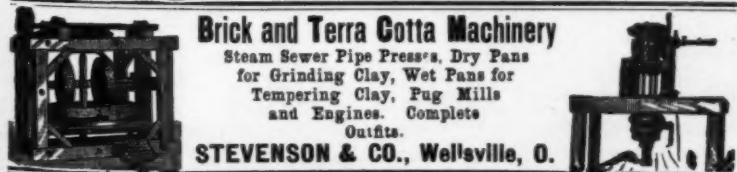
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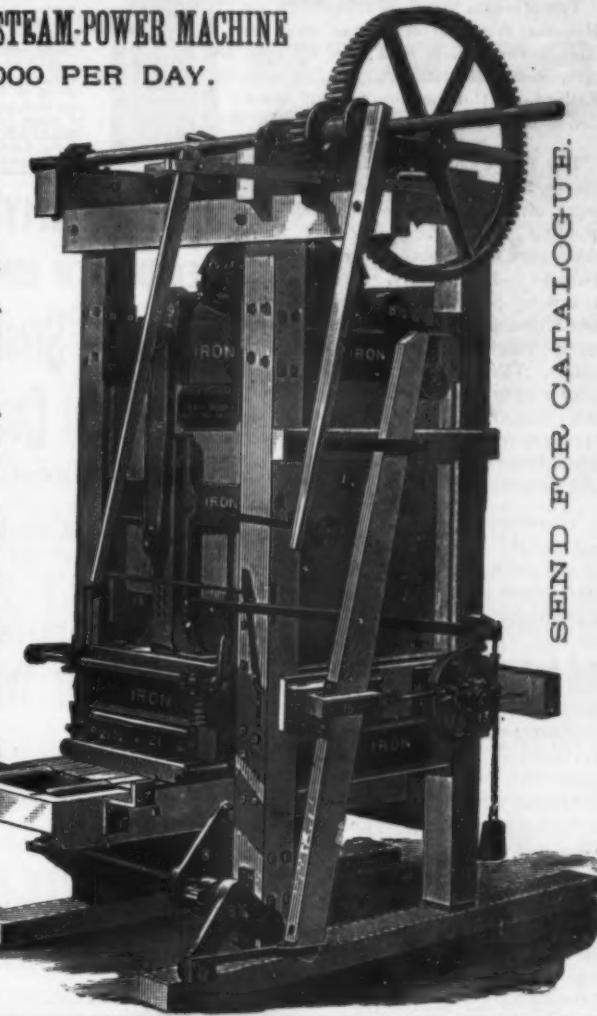
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CAPACITY OF HORSE-POWER MACHINE, 20,000 PER DAY.

Capacity of STEAM-POWER MACHINE

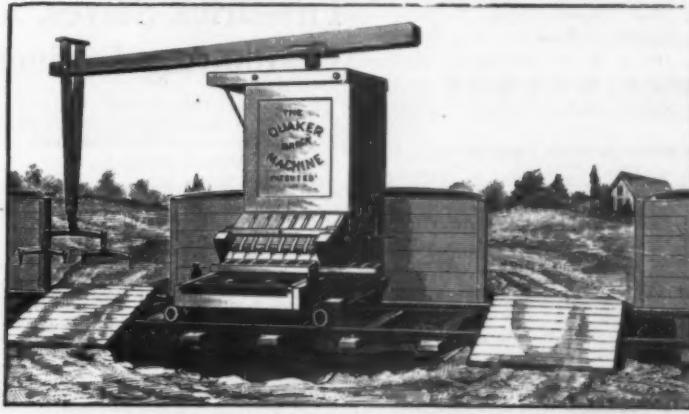
35,000 PER DAY.

**Henry Martin Brick Machine Mfg. Co.**  
LANCASTER, PA., U. S. A.



SEND FOR CATALOGUE.

## Improved Brick Machinery AND BRICK MAKERS' SUPPLIES.



### THE NEW QUAKER HORSE-POWER BRICK MACHINE,

Capacity 15,000 to 20,000 per day. Steam-power 25,000 to 40,000 per day.

Spiral Pug Mills, Mold Sanding Machines, Molds, Barrows, Trucks, &c., &c. We contract to furnish and Equip Complete Yards, Engines, Boilers, Shafting, Pulleys, Belting, &c., &c.

Send for illustrated Catalogue.

Correspondence Solicited.

**FLETCHER & THOMAS, Indianapolis, Ind.**



Send for Illustrated Catalogue.

Mention Manufacturers' Record.

## TRADE NOTES.

THE Menasha Wood Split Pulley Co., of Menasha, Wis., had orders last week for their hickory pulleys from Goss & Singleman, Painter Station, Pa.; P. E. Chase, Rutland, Vt.; Punington-Kimball Brick Co., of Blue Island, Ill.

THE Tanite Co., of Stroudsburg, Monroe county, Pa., send out a very attractive catalogue of their solid emery wheels and grinding machines, triple-coated knife sharpeners, solid emery oil or whetstones, diamond tools and emery. On the cover is a striking picture, evidently an instantaneous photograph, of a workman using an emery wheel and shooting a shower of sparks. The catalogue is neatly and well illustrated to depict the various products of this company, and is fully supplied with the necessary reading matter. This catalogue would be a valuable handbook to every tool and metal worker.

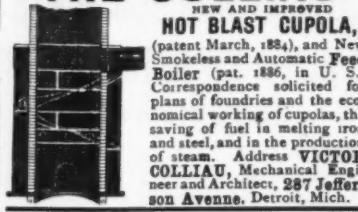
ATTENTION is called to the advertisement of the Winship Manufacturing Co., of Racine, Wis. The "Sanders" made by this concern are said by all sash, door and blind manufacturers to be indispensable for such work and superior to the heavy and expensive roll machines, for reason that the operator can, by a slight move of the lever, control the movement according to the grain of the wood, and the whole operation of the "Windship sander" is so rapid that, considering its simplicity and cheapness, it has had extensive sales in all parts of the country, and is well known and liked in the South.

AMONG the recent orders received by the National Pulley Covering Co., of Baltimore, Md., for their patent friction covering for pulleys may be mentioned the following: Baughman Bros., Richmond, Va.; John T. Noye Manufacturing Co., Buffalo, N. Y.; Nail City Lantern Co., Wheeling, W. Va.; Springfield Foundry Co., Springfield, Mass.; MacKellar, Smiths & Jordan Co., Philadelphia, Pa.; Vanderpoel & Co., Chicago, Ill.; Lansing Gas Light Co., Lansing, Mich.; Schultz Bros., Philadelphia, Pa.; French & Linforth, San Francisco, Cal.; W. S. & F. Cordingley, Newton, Lower Falls, Mass., their orders for February coming from 21 States.

A. W. GUMP & CO., Dayton, Ohio, have, it is said, the reputation of carrying in stock the greatest number of bicycles of any house in America outside of the manufacturers. They now have over 600 bicycles in stock, with several hundred more on the way. They can give their customers any make of wheel they prefer, and can save considerable money on many new wheels. They make a specialty of job lots, and often purchase as high as several hundred wheels at a time from one manufacturer. They make a specialty of taking bicycles, guns and typewriters in exchange, and also handle new typewriters, as will be seen by their advertisement in this issue.

AN interesting experiment was tried some time ago on the occasion of the relining and starting in blast of a large furnace. After the fire-brick were in place, a cheap article of graphite or plumbago was bought, reduced to a paste with water and the interior of the furnace washed with the paste. It gave a slippery glaze—incident to the lubricating quality of the plumbago—to the fire-brick lining, which lessened the time necessary to a heat quite a percentage. The slippery surface refused to be coated with slag or other refuse, and the charge passed down in less time and left the lining free and clear. The expense of the trial was very small compared with the value of the result. The graphite used came from the Joseph Dixon Crucible Co., Jersey City, N. J.

## "THE COLLIAU"



NEW AND IMPROVED  
HOT BLAST CUPOLA,  
(patent March, 1884), and New  
Smokeless and Automatic Feed  
Boiler (pat. 1886, in U. S.)  
Correspondence solicited for  
plans of foundries and the  
economical working of cupolas, the  
saving of fuel in melting iron  
and steel, and in the production  
of steam. Address VICTOR  
COLLIAU, Mechanical Engi-  
neer and Architect, 287 Jefferson  
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JAS. P. WITHEROW.  
ENGINEER & CONTRACTOR,  
Furnace & Steel  
Plant Construction.  
PITTSBURGH. U. S. A.

Blast Furnaces and Steel Works designed  
and erected complete in every detail ready  
for operation. Special attention given to  
the manufacture of

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Safety Water Tube Boilers.

Owning an extensive manufacturing plant,  
I can guarantee promptness in execution,  
and satisfaction in any contracts undertaken by me.

Gordon, Strobel & Laureau,  
(LIMITED),  
ENGINEERS AND CONSTRUCTORS,  
PHILADELPHIA, PA.  
Blast Furnaces, x  
x Steel Plants,  
Fire-Brick Stoves, x  
x Blowing Engines.

We are sole manufacturers of the GORDON-WHITWELL-COWPER FIRE-BRICK HOT-BLAST STOVE, and within four years have introduced them as follows:

Jefferson Iron Works, Ohio.....	4
North Chicago Rolling Mill Co., Ill.....	3
Joliet Iron & Steel Co., Ill. ....	4
Missouri Furnace Co., Mo. ....	2
Jupiter Furnace Co., Mo. ....	3
Western Steel Co., Mo. ....	3
Tenn. Coal, Iron & R. R. Co., Ala. ....	18
Cleveland Rolling Mill Co., Ohio. ....	4
Belmont Nail Co., W. Va. ....	4
Ala. & Tenn. Coal & Iron Co., Ala. ....	9
Nashville Iron, Steel & Charcoal Co., Tenn. ....	4
Decatur Land, Iron & Furnace Co., Ala. ....	2
N. Y. & Perry Coal & Iron Co., Ohio. ....	4
Princess Furnace, Va. ....	2
*Irondale Furnace, W. Va. ....	4
Cornwall Anthracite Furnaces, Pa. ....	4
Duluth Iron & Steel Co., Minn. ....	4
Reading Iron Co., Pa. ....	3
Total ..... .....	85

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MANUFACTURED BY THE

Boston & Lockport Block Co.  
162 Commercial St.  
BOSTON.



The chief merits of this hoist that we wish to bring to the public notice is that it only requires

ONE MAN TO  
Hoist the Load.

It is also far more compact, taking up less room than any other make, and will hold the load at any point. Send for circular and prices. Every hoist warranted.

FOR  
Ice-Making & Refrigerating  
MACHINERY,

ADDRESS THE  
Ring Refrigerating & Ice Machine Co.

OFFICE:  
218 CHAMBER OF COMMERCE,  
ST. LOUIS, MO.

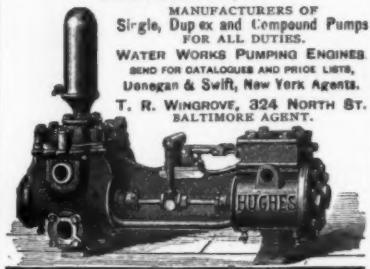
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Until you have seen our circulars. Engines complete from 5 to 110 horse power, both Vertical and Horizontal, at prices below those of other reputable makers. 1600 in use. Boilers of every style. Automatic Engines for Electric Lights. Centrifugal Pumping Machinery for Drainage or Irrigation. Established 22 years. Perfect satisfaction guaranteed. Ask for Circular M and address

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CLEVELAND, O.

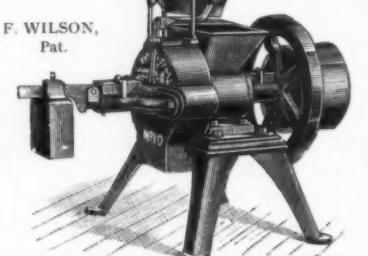
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Single, Duplex and Compound Pumps  
FOR ALL DUTIES.  
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OF ALL DESCRIPTIONS.

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It is supplied ready for use, in rolls of 200 square feet, and weighs with Asbestos Roof Coating, ready for shipment, about 55 pounds to 100 square feet.

It is adapted for steep or flat roofs in all climates, and can be readily applied by unskilled workmen.

There are inferior imitations of our Asbestos Roofing, purchasers are cautioned.

Samples and Descriptive Price List free by mail.

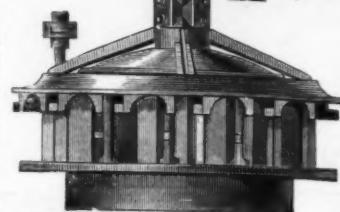
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## SUCCESS

## Water Wheel.



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High Percentage,

Great Simplicity,

CLOSE FITTING,

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EASY WORKING GATE

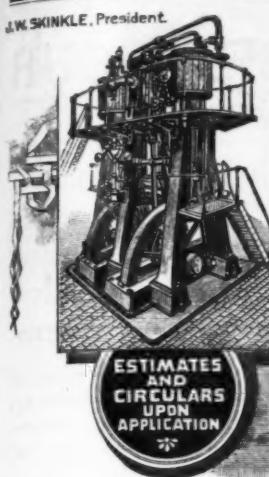
Under all Circumstances.

Sold under Full Guarantee at Low Prices.

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CHRISTIANA MACHINE CO., Christiana, Pa.

Makers of all kinds of Machinery for Transmitting Power. Perfect Goods Only.



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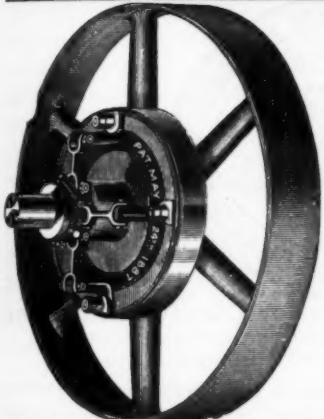
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Paper Mill  
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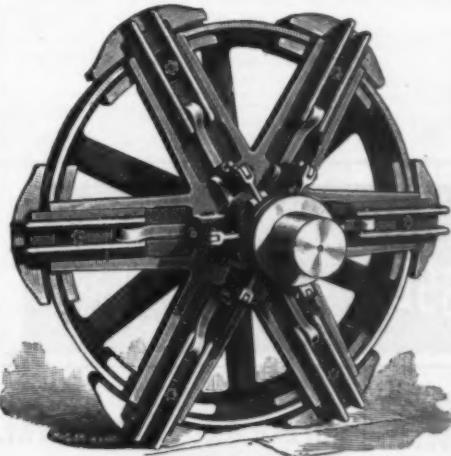
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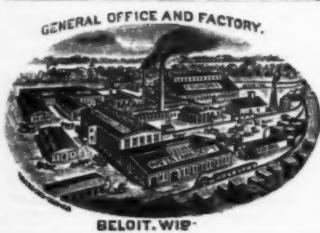


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Send for new Catalogue, Power Transmission Machinery.



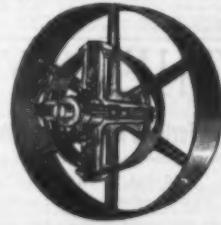
ECLIPSE FRICITION CLUTCH PULLEYS  
AND CUT-OFF COUPLINGS.

SEATTLE, WASHINGTON TER., 5 26, 1889.  
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DEAR SIRS: The Clutch Pulley (diam. 10 in., face 21 in) works satisfactorily in every particular, and is a great convenience. We have two, and can stop either the main saws or the gang edger, or both whenever desired, without stopping the engines. Yours respectfully,  
Yesler Wood, Coal & Lumber Co., J. D. Lowman, Sec'y.

ST. JOSEPH, MO., June 24, 1889.  
Eclipse Wind Engine Co., Beloit, Wis.  
GENTLEMEN: The Clutch Pulley reached us all right; it works to a charm. If we had put it on last April, in place of one we had, we should now be ahead over \$600, which we have lost in time and breakages. Yours,  
The Brick & Terra Cotta Mfg. Co., F. P. Halsey, Sec'y.

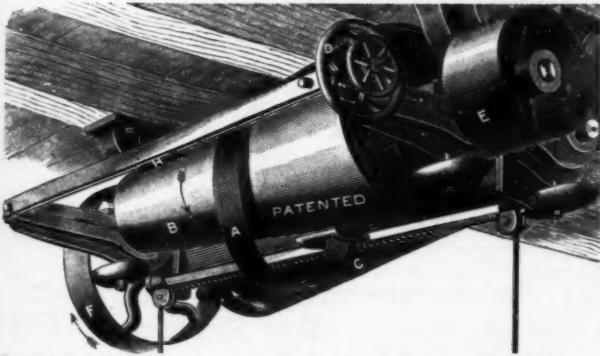
ECLIPSE WIND ENGINE CO., - Beloit, Wis.

Send for July, 1889 catalogue, and see where and by whom they are.



THE EVANS SYSTEM OF FRICTION  
(PATENTED.)

FOR TRANSMITTING POWER WITH EITHER STEADY OR VARIABLE SPEED.



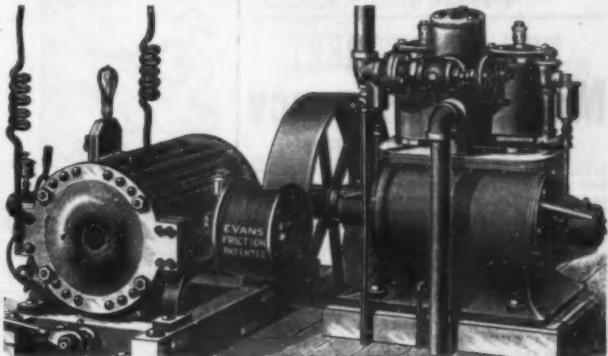
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GREATER

EFFICIENCY

THAN WITH

ORDINARY BELTS.



By the use of our Friction Cones the speed of any machine may be varied automatically or by hand while the machine is running, and the machine can be started and stopped without the use of loose pulleys.

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The most desirable locations in the South for manufacturing wagons, stoves, agricultural implements, furniture, or for foundries, machine shops, rolling mills, muck bar mills, nail works, glass works, cotton or woolen mills, and tanneries, are to be found in Virginia along the line of the Norfolk & Western Railroad from Norfolk to Bristol, and upon its branch lines. Hard wood of every variety; pig iron from the furnaces at Lynchburg (2), Roanoke (2 in operation and 1 now under construction), Pulaski (1), Ivanhoe (1), Radford (1, to be built in 1890), Salem, Graham Max Meadows and Bristol (1 at each point now under construction), bar iron from the rolling mills at Roanoke, Lynchburg and Richlands (1 to be built in 1890); coke and semi-bituminous coal from the Pocahontas Flat Top field; superior gas coals from the mines on the Clinch Valley Extension; glass sand from Tazewell county; cotton from the markets of the Southern States, and wool from all the Western and Southwestern States and Territories at advantageous freight rates. Favorable freight rates made upon raw materials to all factories established upon its line, as well as to points in the United States and Territories upon the manufactured articles.

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**Newport News and Mississippi  
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ON SOLID TRAINS.

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MEMPHIS, LITTLE ROCK,  
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SHOULD STOP AT

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The Most Elegant Hotel in America. Situated commanding a beautiful view of Lake Erie and Niagara River. Spacious conservatory filled with rare exotic. Special rates made for parties remaining one week or longer. Hotel particularly well located for business men and their families. LATE DINNERS, MUSIC.

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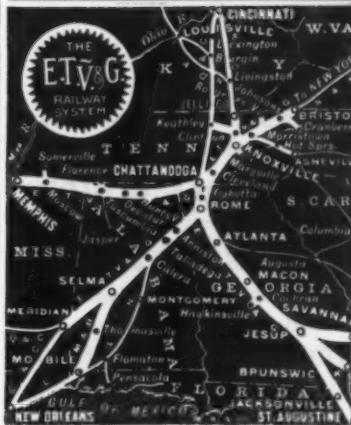
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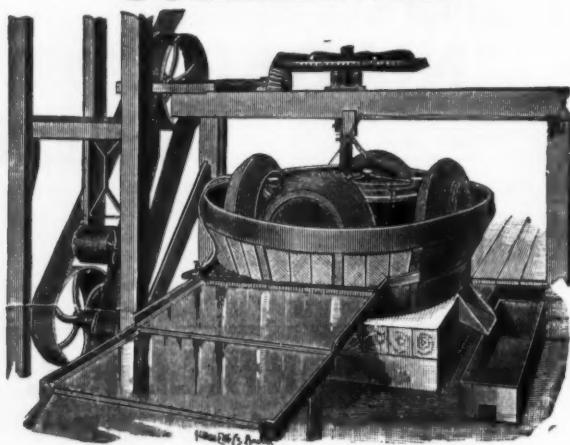
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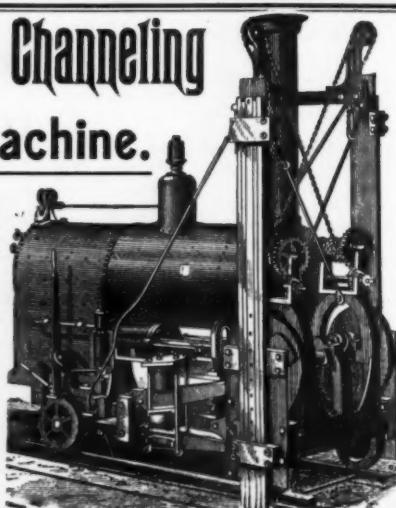
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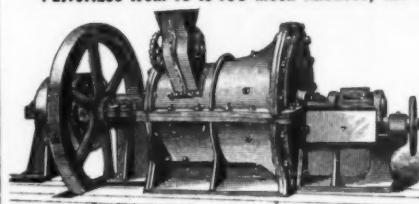
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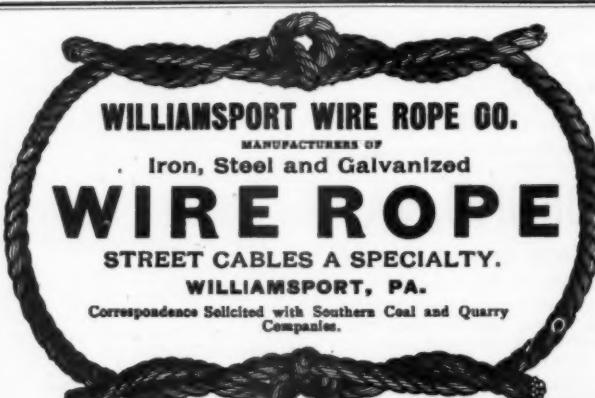
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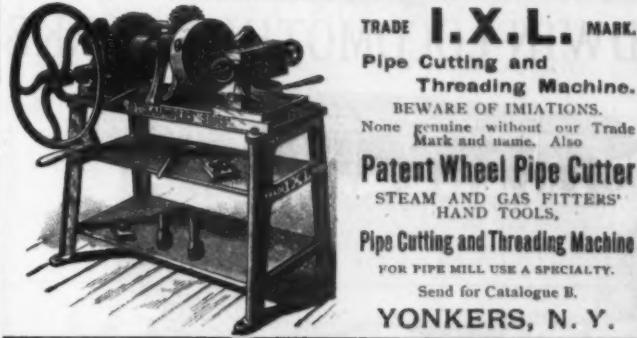
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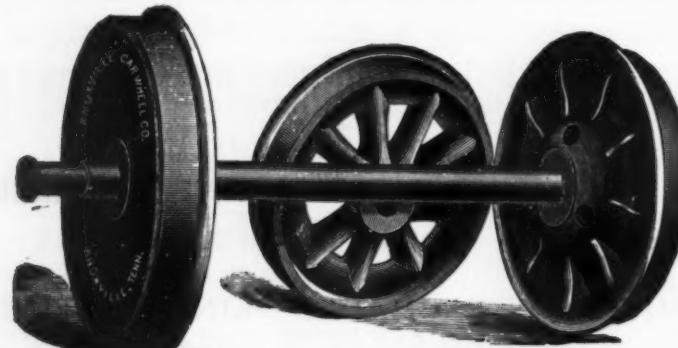
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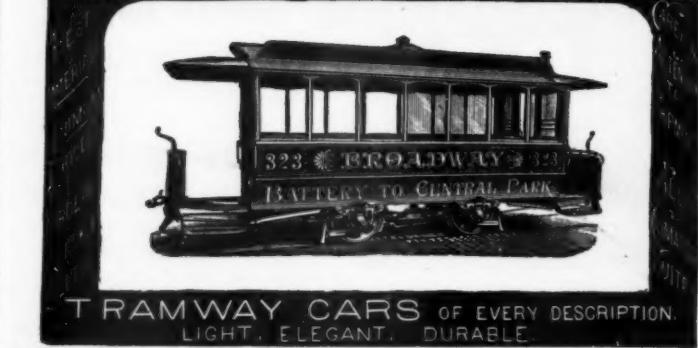
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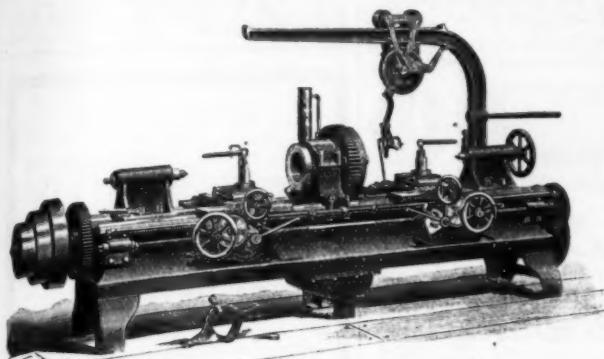
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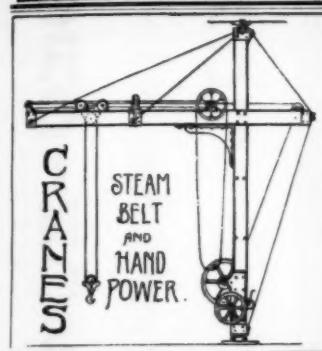
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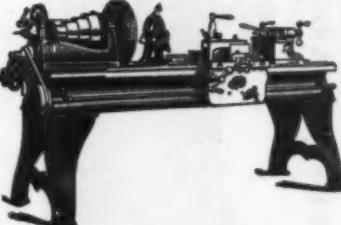
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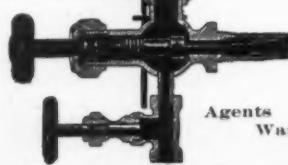
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50 cents per pound, for casting, also 50 cents per pound  
Orders by mail promptly attended to.

Printers' Rollers.

WEBSTER'S "VACUUM" EXHAUST STEAM ENGINE  
etc., utilizing the condensation to boiler, and for making  
hot water, paraffin, etc., for boiling, heating and other pur-  
poses. Send for pamphlet. WARREN WEBSTER & CO.,  
491 N. Third street, Philadelphia, Pa.**Barnard's Separator**For Separating and Removing Entrained  
Water from Live Steam;

AND Condense Water, Oil, Dirt, Etc., from Exhaust Steam.

SPECIAL DESIGNS FOR SURFACE CONDENSERS.



Send for Circular and Prices.

**GEO. A. BARNARD,**  
15 Cortlandt St., New York.**MASON REGULATOR CO.**

SEND FOR PAMPHLET

PRICES AND CUTS.

SHEPARD'S New 500 SCREW-CUTTING FOOT LATHE  
Foot and Power Lathes, Drill  
Presses, Scroll Saw Attachments,  
Chucks, Mandrels, Twist Drills,  
Dogs, Calipers, etc.  
Lathe on trial. Lathe on  
payment.  
Send for catalogue of Outfits  
for Amateurs or Artisans.  
Address H. L. SHEPARD, Agent,  
134 E. 2d Street, Cincinnati, Ohio.DEAR SIR—We take pleasure in ad-  
vising you that**Mess. Jas. Robertson & Co.**17 S. Charles Street,  
BALTIMORE, MD.are our representatives in BALTI-  
MORE for the sale of our Guaranteed  
Brands of Roofing Plates, namely:**"Gilbertson's Old Method"**  
**"Merchant's Roofing"**  
and **"Caramet."**As complete stocks of all regular sizes  
and thicknesses will at all times be carried  
by the above firm, parties desiring these  
brands will receive prompt attention.

Yours very truly,

**MERCHANT & CO.****FORGINGS**

Scranton's Improved Nail Puller

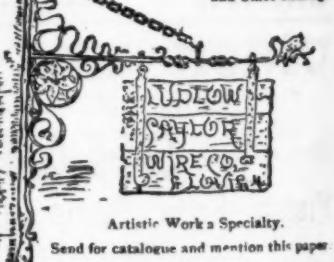
MANUFACTURED BY

THE BELDEN MACHINE CO., New Haven, Ct.

**WIRE RAILING**

and Ornamental Wire Works.

DUFUR &amp; CO. 1113 &amp; 1115 N. Howard St., Baltimore.

Wire Railing for Cemeteries, Lawns, Gardens, Offices  
and Balconies; Window Guards, Tree Guards,  
Wire Cloth, Screens, Fenders, Caps, Sand and Coal  
Screens, Iron Backboards, Chairs, &c.**WIRE & WIRE GOODS.**Wire Cloth, Rope, SCREENS for  
Coal and Ores, Barbed and  
Plain Fencing Wire, Baskets  
and Office Railings.

Artistic Works Specialty.

Send for catalogue and mention this paper.

### Robertson's Exhaust Oil Extractor and Filter.

In the heating of mills, hotels and office buildings, as well as in many mechanical ways, such as the manufacturing of ice refrigerating machines, in dye houses, bleacheries, woolen and paper mills, breweries, etc., exhaust steam takes an important part, and by utilizing the condensation the fullest economy can be obtained.

Probably one-half of the initial heat is retained in the exhaust on leaving the cylinder, and this exhaust, when condensed, is the very best for boiler purposes, all the impurities having been expelled. A serious obstacle, however, exists with many, preventing the adoption of this most important and economical system.

The oil fed into the cylinders and on the rods for lubricating purposes, being carried out with the exhaust, adheres to the inner surface of pipes, radiators and valves, at once reducing their radiating capacity and necessitating an increased pressure of steam. Where the condensation is returned to the boiler the oil is carried with it, working serious injury to the shell and tubes and entire system (in many cases requiring their removal), and causing the boiler to foam.

The Robertson extractor has been constructed to remove these obstacles. It is adapted to either vertical or horizontal pipes, and in operation is simple and effective.

Steam on entering inlet A strikes plate B and is deflected against roughened sides of extractor, breaking it up and depositing a considerable quantity of oil and water, and then partially cleansed, seeks an outlet through separators C and D; one within the other, and both perforated to suit existing conditions, great care being taken to have the area of these perforations considerably greater than the inlet, and governed by the back pressure the engine or pump may be working under. These separators presenting a broad, rough surface to the current of steam, again break it up and complete the separation of oil and water (which in the horizontal drop to the bottom, and in the vertical are carried to side of extractor by small pipe E), the cleansed steam passing out through the outlet. The effectiveness of a device for this purpose consists in offering as many obstacles and breaking up the steam as much as possible, without creating back pressure, and the reader will at once see, by comparison with others, that the Robertson extractor includes these features more thoroughly than any other. There is no possible chance of this extractor becoming sealed by an

accumulation of oil and water in the pocket and choking up the outlet, as both the sides and top of separators (about  $\frac{1}{4}$  of their circumference) are perforated, affording ample means to escape.

Large area for expansion of steam is provided immediately on its entrance, and the roughened sides add fully three times the extracting ability of a smooth surface.

It is pretty generally acknowledged that lubricating and machinery oil loses but a trifle of its lubricating qualities in passing through the cylinders, consequently that

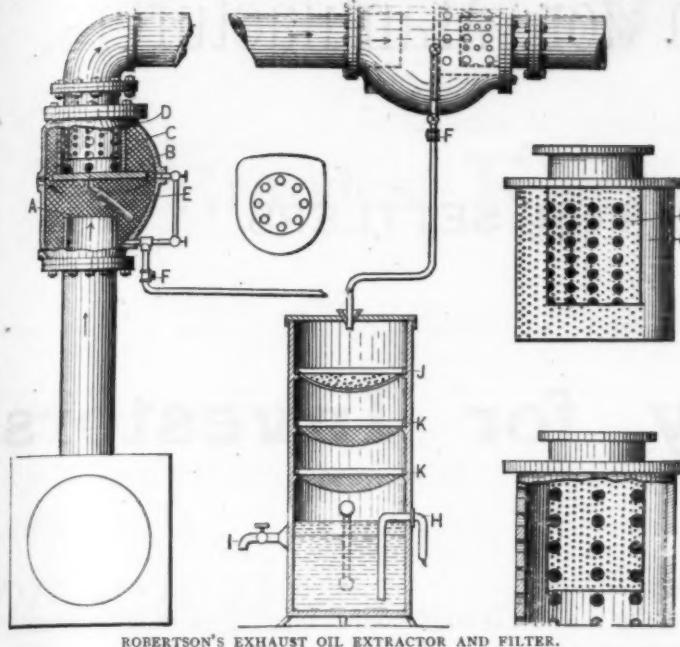
under all brakes. Its fulcrum, which can be taken out by loosening the set screw, has four corners, and its position can be changed on the bar in a moment. This feature alone makes it superior to all others. It has no joints, no "lost motion." It takes hold at a point on the wheel where it moves the car instead of lifting the wheel from the rail.

A fuller description, with letters from those who have used the bar, can be had from the Southern agent, Mr. J. W. Harris, Anniston, Ala.

By a hand-screw within convenient reach, the platen or table can be moved rapidly on the column, and can be clamped firmly at any desired height."

The workmanship throughout is first-class, and the material used the best for the purpose. All bearings and wearing surfaces are especially fitted for durability, and ample provision is made for taking up wear.

We claim, therefore, for this drill superiority both in simplicity of construction,



ROBERTSON'S EXHAUST OIL EXTRACTOR AND FILTER.

portion passing out with the exhaust, if recovered and passed through a filtering process, can be used over and over again, resulting in a great saving and soon returning the cost of the entire apparatus. The filter described, either in connection with the extractor or used separately, presents features of much merit, while being exceedingly simple. The oil and water entering at the top pass first through a finely perforated tray (J), depositing all large sediment and then through two filtering cloths (K K) of different texture, completely cleansing it of every particle of grit and foreign matter. The siphon (H) carries off the water automatically, the oil being drawn off through cock (I) as often as the accumulation indicated in the gauge-glass may require. The lid and filtering tray being loose, makes it a very easy matter to clean.

### The Victor Car Mover.

The Victor car mover is a recently patented device that seems to be an immense

### Barnes' New Sensitive Drill.

The sharp competition existing between manufacturers in all lines of metal work makes it necessary for them to employ only the most perfect tools and machinery in order to produce their goods to the best possible advantage.

This demand for improved machinery has stimulated the inventive faculties of our mechanics and engineers with the result that new machines are being produced, which, considered in relation to their special adaptation for the purposes for which they were designed, are almost absolutely perfect.

As a case in point, attention is called to the new sensitive drill made by the well-known house of W. F. & John Barnes Co., No. 17 Ruby street, Rockford, Ill. The drill is shown by the accompanying cut, and it will at once be seen that the principles involved in its construction mark a radical departure from other tools of this kind heretofore made.

There is a constantly increasing demand for such a drill, and it is eminently adapted for use in the manufacture of electrical appliances, builders' and cabinet hardware, and in general where the drilling is not large but where delicate adjustment and rapid and effective operation are essential.

It is, in the strictest sense of the word, a sensitive drill, for the variations of speed and power are so completely under the control of the operator and the adjustment so perfect, that the person using the drill is always able to determine the pressure which is being applied.

Herein lies the economy of this new tool in the preventing of the breakage of twist drills. To anyone familiar with the subject it is hardly necessary to refer to the great waste in the breaking of small twist drills when used with the ordinary drill press.

When it is further considered that all the adjustments of power and speed can be made instantly without shifting belts or stopping the machine, the high claims the manufacturers make for it seem not unfounded. The following is from the catalogue of the manufacturers:

"More or less driving-power can be ap-



BARNES' NEW SENSITIVE DRILL.

which renders it less liable to derangement, and in effectiveness of operation on account of the variations of speed and power being so completely under the control of the operator, whereby all the adjustments are made with the least possible loss of time. It is smooth and almost noiseless in operation and entirely free from the vibratory motion commonly found in drills of this class where the spindle is driven by belt.

For all the uses for which a sensitive drill is required, we believe ours to be unequalled.

CHATTANOOGA, TENN., March 22, 1890.—W. F. Hutcheson, of Sweetwater; W. A. Campbell, John A. Campbell, C. P. Robertson, and others of Chattanooga, have just organized a stock company and are having plans drawn for erecting a 50-barrel flour mill, the corporate name being the Mountain City Mill Co. A number of the leading mill furnishers are making estimates for machinery and mill work. Erection of building will begin in 30 days  
CAMPBELL & CO.

GLASGOW, VA., March 21, 1890.—The Glasgow Manufacturing Co., capital \$25,000, all subscribed, has been organized with W. A. Chesterman, general manager. Business, to make sash, doors and blinds and do general construction business. Glasgow Improvement & Construction Co., organized; capital, \$25,000, all subscribed; own 200 lots in town of Glasgow, Va. Will improve same by putting up houses for rent and sale. Glenwood Furnace Co., organized; Mr. R. H. Catlett, president; \$200,000 already subscribed to do business at Glasgow. Glasgow Water Works being constructed; pipe line is now being received for pipe.  
M. M. MARTIN, Gen'l Man.



THE VICTOR CAR MOVER.

improvement on anything of the sort heretofore in use.

The manufacturers' claim for it the following advantages:

It is the best device ever used for moving cars by hand, for the following reasons: It is the most powerful. It stays on the rail, and does not slip on oily or frosty rail. It is made of the best steel. It will work

plied to the drill spindle, as the size of the drills or the nature of the work may demand.

The feed lever is provided with a very sensitive adjustment, which with the perfect control of the operator over the speed and power, makes it possible to use the smallest drills, with the least possible danger of breakage,

Subscribe to the MANUFACTURERS' RECORD, Price \$4.00 a year, or six months for \$2.00.

# NEW ENGLAND CITY, GEORGIA.

An Excellent Location for Manufacturers.

A DESIRABLE HOME FOR SETTLERS.

## Great Opportunity for Investors.

A party of New England business men, after careful examination of different localities in the South, purchased about 20,000 acres of what is conceded to be the richest mineral land in that section (proven by actual assays). It is situated in

### DADE COUNTY, GEORGIA,

in close proximity to the rich mines which have been worked for years by ex-Gov. Brown. Beautifully located in the Tennessee Valley, on high ground, with pure water, excellent opportunity for drainage and climate which is simply perfect, we have natural advantages possessed by few cities in the country.

**TRANSPORTATION.**—The Alabama Great Southern Railroad, a link of the Queen & Crescent Route, runs directly through the city site; the Nashville & Chattanooga Railroad cuts across the northern extremity of the property, and two other railroads have already been surveyed which connect the city with other trunk lines. This property is located within two miles of the Tennessee River, which is now navigable from Chattanooga to the Gulf.

**MINERALS.**—Coal and Iron are found here upon the same quarter sections of land and in sufficient quantities to supply all the iron industries of New England.

**TIMBER.**—Stone for building purposes and Clay for fire-brick are here in inexhaustible quantities, and there is everything necessary to build and support a city of great size.

**OUR POLICY.**—Manufacturers wishing to avail themselves of these natural advantages will find this an excellent location, and the company will deal with them most

liberally. There is no place that offers greater inducements or better prospects to careful investors.

**CAPITAL STOCK \$5,000,000**, divided into 50,000 shares of \$100 each; of this amount 24,000 shares are offered for sale at \$25 per share.

## \* CITY LOTS. \*

CITY LOTS WILL BE  
**Sold at Public Auction at New England City  
on Tuesday, 15th Day April next.**

An Excursion Train will leave Boston on the 12th of April. Reduced Rates.

Ex-Gov. ROSWELL FARNHAM, President.

GEORGE M. GLAZIER, 1st Vice-President.

ISAAC J. BROWN, Secretary and Treasurer.

### DIRECTORS:

HON. ROSWELL FARNHAM, President, ex-Gov. of Vermont.	ALONZO F. PIKE, Pike Station, N. H.
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HENRY C. LIBBY, Alder Brook, N. H.	HON. FRANK D. CURRIER, Canaan, N. H.
	JOHN FARR, JR., Littleton, N. H.

Correspondence invited from all wishing to purchase stock or establish manufacturing enterprises or to purchase city lots.  
Address

## The New England Company,

No. 1 Beacon Street, Boston,

or at New England City, Dade County, Ga.

# GLASGOW, —VIRGINIA.

The Grandest Enterprise of the New South.

## THE LOCATION

is naturally fine and adapted to the construction of a large city.

## THE CLIMATE

guarantees immunity against epidemics.

## WATER-POWER

is practically unlimited.

## IRON ORE

in abundance and of fine quality.

## LIMESTONE

near at hand and plentiful.

## CEMENT

extensive deposits of good quality.

## GLASS SANDS

in large quantities and of high grade.

## TIMBER

of various kinds and abundant.

## FUEL SUPPLY

Pocahontas and New River Coke in convenient proximity.

## TRANSPORTATION FACILITIES

Two trunk lines—Norfolk & Western, with its Shenandoah Valley Railroad connection, and the Chesapeake & Ohio—giving direct communication with fields of finest Coaking and Steam Coals in the country, with deep water transportation with Norfolk & Newport News, with the West via Cincinnati.

## THE PITTSBURG & VIRGINIA R. R.

to be built in the near future will go through the Blue Ridge mountains at this point.

## FACILITIES FOR MANUFACTURING

unexcelled by those offered by any locality in the South.

## ADDRESS

ROCKBRIDGE COMPANY,

Ex-Gov. FITZHUGH LEE,

President.

Hon. WM. A. ANDERSON,

Vice-President.

M. M. MARTIN,

General Manager.

# To Men of Moderate Means.

In the Heart of the Richest Iron Region in Virginia.

TOWN PROPERTY AT

# NEW CASTLE,

TO BE HANDLED BY THE

# WEST SALEM LAND CO.

AS "SERIES C."

**H**AVING previously advertised "Series B," the stock of which was based upon the Baxter W. Logan property near Salem, Va., and having succeeded in selling out that purchase at a profit of more than four for one to the stockholders. The West Salem Land Company, whose charter authorizes the handling and improvement of property not only in Roanoke but in the adjoining counties, now has to offer the stock of "SERIES C," which is based upon three tracts of land (113 acres) adjacent to the town of New Castle, in the heart of

The Richest Iron Region in Virginia.

This property is capable of being divided into about

## Six Hundred Building Lots.

As in previous series of stock issued by this company the stock now offered is based exclusively upon the town-lot property at New Castle, and the management and proceeds of this "SERIES C" will be kept separate from other series.

# SHARES TEN DOLLARS EACH.

PAYABLE AS FOLLOWS: One Dollar at time of Subscription; One Dollar June 1; One Dollar July 1; One Dollar August 1; One Dollar September 1—a total of Five Dollars having thus been paid the stock will be declared full paid and non-assessable, and certificates of \$10 par value will forthwith be issued.

## Special Features of Series C.

WEST SALEM LAND COMPANY.

The total capitalization is \$100,000; of this \$60,000 has been taken by a few men and the remaining \$40,000 in shares of \$10 each is now offered at \$5 a share, payable in five monthly instalments. The town of New Castle, which is the county seat of Craig County, Va., lies half way between the Chesapeake & Ohio Railroad at Eagle Mountain and the Norfolk & Western Railroad at Salem. A branch of the Chesapeake & Ohio is now under contract to New Castle and will be in operation on or before September 1, 1890. This railroad will open up the richest mineral region in Virginia, and there will be an immense development of resources and consequent enhancement of values.

We consider this stock more valuable than "Series B," which has just been sold at a profit of more than 4 for 1 to stockholders.

### ORGANIZATION PLAN OF THE COMPANY.

The WEST SALEM LAND COMPANY, of Salem, Virginia, was organized under a perpetual charter of incorporation January 6th, 1890, with George Allen, president and manager; John A. Francis, vice-president; Chas. C. Tompkins, secretary, and Jacob S. Baer, treasurer and attorney. The company was organized for the purpose of buying, developing and selling land in Salem and in the adjoining counties. The plan of operation will be to purchase property, to issue stock based on that particular purchase, divide the property into lots or small pieces and to sell it as rapidly as practicable, distribute the proceeds among the stockholders of that series and cancel the stock. The stock in this

company will be issued on the series plan and the management and proceeds of each class or series will be kept separate.

Series A has been sold and closed.

Series B has been sold and closed.

Class C covers the above-mentioned properties adjacent to New Castle.

Applicants for stock in "Series C" will please remit \$1 per share to the West Salem Land Company, Salem, Va., whereupon receipt will be sent by return mail.

If further information be desired address

**GEORGE ALLEN, President and Manager, or CHAS. C. TOMPKINS, Secretary, Salem, Va.**

# GRAHAM,

Tazewell County,

VIRGINIA.

## The Graham Land & Improvement Co.

Will Offer For Sale on Thursday, April 10th, 1890

At 10 o'clock, at the office of the Company in Graham,

## TOWN LOTS

AS SHOWN ON PLAN NOW READY FOR DISTRIBUTION.

**TERMS OF SALE:** One-Third Cash, One-Third in One Year, One-Third in Two Years, with interest at 6 per cent. per annum on the deferred payments.

Applications for lots at the Company's prices will be received up to noon on Tuesday, April 8th, 1890. Parties making application by letter will be careful to designate the section and the number of the lot or lots desired.

Lots for which more than one application shall be received will be sold to the highest bidder at Public Auction on Thursday, April 10th, at 10 o'clock, at the office of the Company in Graham.

After the public sale of lots above mentioned, the balance of the lots remaining unsold will be offered to the public at the prices fixed by the Company, which range from \$125.00 to \$500.00 each, according to location.

The Graham Land & Improvement Company has purchased about 900 acres of land, including the old town of Graham, at the junction of the Clinch Valley & Ohio extensions of the Norfolk & Western Railroad, in Tazewell County, Virginia, and has improved the property by laying it out in streets and lots.

The land is so situated, being at the junction of two important branches of the Norfolk & Western Railroad, with the Bluestone River running through it, and in close proximity to the Pocahontas Coal Field and the Iron Ore deposits of the Clinch Valley, that it is believed it will within a short period become an important iron manufacturing center as well as a distributing point for the entire coal field.

The Clinch Valley & Ohio Extensions of the Norfolk & Western Railroad run through a section of country heavily covered with Poplar, White and Chestnut Oak Timber, and it is believed that Graham, at the juncture of these two branches, is a most desirable location for the establishment of saw mills, tanneries, pulp mills and other woodworking establishments.

**The Following Desirable Industries have**

**Already Been Secured.**

THE GRAHAM FURNACE COMPANY, with a capital of \$250,000.00, have under construction an iron furnace, dimensions 16x70 ft., with a

capacity of about 100 tons per day, and expect to be in blast by November 1st.

THE VIRGINIA LUMBER COMPANY, with a capital of \$50,000.00, are erecting their buildings and will be in operation by the first of May.

Arrangements are also being made with parties who propose building at once a large general supply store and warehouse, buildings to cost about \$10,000.00, and having a working capital of not less than \$50,000.00.

A company with a capital of \$20,000 is also formed for the manufacture of ice, and expect to be in operation in the course of a few months.

THE GRAHAM LAND & IMPROVEMENT COMPANY have plans perfected for a fine hotel, which they hope to have ready for occupation by September first. The hotel will be heated by steam and lighted by electricity, and it is the aim of the company to make it one of the most attractive hotels in Virginia.

Parties desiring to purchase lots will be furnished with maps and price-lists and any desired information by addressing

**R. K. WRIGHT, Jr., Agent, Graham, Va.**

or **E. J. COLLINS**, Secretary, Bulitt Building, Philadelphia, Pa.

H. M. SILL, President.

EDWARD ILSLEY, Vice-President.

E. J. COLLINS, Secretary and Treasurer.

### DIRECTORS:

A. J. MAY, Tazewell C. H., Va.	THOMAS GRAHAM, Philadelphia, Pa.
C. M. CLARK, Philadelphia, Pa.	J. B. GREEVER, Graham, Va.
J. D. SERGEANT, Philadelphia, Pa.	J. H. DINGER, Philadelphia, Pa.
H. M. SILL, Philadelphia, Pa.	

# CHARLOTTESVILLE, VA.

OFFERS

Great Advantages and Liberal Inducements to Manufacturers

DESIRING TO LOCATE SOUTH.

Railroad Facilities, Cheap Rates and Rapid Transportation to all Points Unexcelled.

*PERFECT CLIMATE. UNLIMITED SUPPLY OF EXCELLENT WATER.*

Gas, Electricity and Street Railway. Free Schools and Churches. Different Lines of Manufacturing Enterprises Already in Successful Operation Here.

## A LIVE AND GROWING PLACE.

HOME CAPITAL WILL JOIN IN THE ESTABLISHMENT AND OPERATION OF FACTORIES.

COME AND SEE, OR WRITE TO **JOHN M. WHITE**, President.

CHARLOTTESVILLE INDUSTRIAL & LAND IMPROVEMENT CO., Charlottesville, Va.

"The South is the coming El Dorado of American adventure. May the Almighty speed and guide her onward progress!" So wrote the Hon. W. D. Kelley, M. C., of Pennsylvania, a few months ago; and every day brings forth new evidence to prove the correctness of his prediction and to show that without a doubt the South is to be the richest country upon the globe. In climate, soil, mineral and timber wealth, in rivers large and small, in a long seacoast, in abundant rainfall, in healthfulness and in every other advantage that could be asked nature seems to have done her best for this favored land. The wealth in iron and coal is beyond estimate. Of timber there is an unlimited supply, including nearly every variety of hardwoods for woodworking purposes.

Six Trunk Line Railroads at  
**BESSEMER**

In the heart of Mineral Alabama, encircled with hills of Coal, Iron and Limestone Rock.

WHERE  
MONEY  
WILL  
GROW!

Seven Furnaces, output 1890, 250,000 tons; Rolling Mill, 100 tons daily; Fire Brick Works, 25,000 daily; Many Lesser Industries.

Offers Thirty Varieties of Hardwoods for Woodworking Industries.

11,000 City Lots For Sale.

The Bessemer Land & Improvement Co.

this new year, are prepared to deal liberally for the founding of Iron and Woodworking industries in this growing Mining and Manufacturing Center.

**H. M. McNUTT,**

Secretary.

President.

# DENISON, TEXAS.

THE  
Future Manufacturing and Commercial Center  
OF THE  
GREAT SOUTHWEST.

DENISON SUPPLIES THE COAL FOR TEXAS.

She has at her gates the only **COKING COAL** of any value in the Mississippi Valley. To the Southwest lies the best **MAGNETIC IRON ORE** in the world, while to the north and Southeast are fields of **BROWN HEMATITE ORE** of the finest grade. These ores must meet the **COKE** and **COAL** at DENISON and there to be worked.

DENISON cannot be surpassed for **HEALTHFULNESS** and **BEAUTY** of location. Six divisions of railways terminate at Denison and are operated by her citizens.

DENISON has an abundant supply of pure, soft water and plenty of good, cheap **BUILDING MATERIAL**.

The attention of investors and those seeking advantageous locations for business or for manufacturing plants is invited to the opportunities presented at Denison.

MUNSON & BRO. HAVE SUPERIOR FACILITIES FOR THE SAFE AND PROFITABLE INVESTMENT AND HANDLING OF CAPITAL.

For information about DENISON and for bargains in **BUSINESS** and **RESIDENCE PROPERTY**, **ACRE PROPERTY** and **FARMS NEAR THE CITY**, write or call upon

**MUNSON & BRO.**  
301 WOODWARD STREET, DENISON, TEXAS.

# ROANOKE, VA.

SCOTT & RIVES,  
REAL ESTATE AGENTS.

**Now is the Time to INVEST in ROANOKE REAL ESTATE**

**Over One Million Dollars**

Has recently been invested in INDUSTRIAL ENTERPRISES which are in SUCCESSFUL OPERATION. Capitalists from all sections of the country are invited to investigate the unequalled advantages of our city, and to bear in mind that

**No Investor in Roanoke Real Estate has ever Lost a Dollar.**

There is a great demand for houses of all classes and parties who will invest their money in that way can rest assured of realizing from ten to fifteen per cent.

**POPULATION IN 1880 WAS 400, AND IN 1890 IS 20,000.**

We will be glad to give information in regard to Roanoke, and solicit correspondence.

**DALLAS, TEXAS,**  
OFFERS SPECIAL INDUCEMENTS TO  
**Manufacturers and Investors.**

**Dallas has a Population of Over 60,000 People,**

And being the commercial and financial center of the richest country in the United States, it affords a large home market for manufactured articles; and being well situated for cheap fuel with abundant raw materials, cheap homes for employees and unsurpassed railroad facilities to all parts of the State and all adjacent States and territories, it is undoubtedly one of the best places for manufacturing in the southwest.

**The Dallas Manufacturers' Aid and Improvement Co.**

Has been organized for the purpose of promoting manufacturing. The Company has purchased **400** acres of land in North Dallas, near the city limits. This land is elevated, has good drainage and an abundance of fine water, and has ample railroad and switch facilities. A part of this has been set apart to be used as **Sites for Factories**, and a part will be **Platted into Lots**, which will be sold to operatives, or on which houses will be built to be rented to operatives.

The company will take stock in manufacturing enterprises, and will give sites FREE. The company is composed of the leading bankers and merchants, the wealthiest and most progressive citizens of Dallas. With all the natural advantages possessed by this locality, supplemented by the inducements that will be offered by this company, the opportunity presented to manufacturers is an extraordinary one. For information write to the

**Manufacturers' Aid and Improvement Company,**  
**DALLAS, TEXAS.**

## WILMINGTON, NORTH CAROLINA.

This pleasant and growing city invites enterprising citizens and capitalists from all parts of the civilized world.

**\$150,000 Freedom from Municipal Taxation \$150,000**  
**Splendid Opening for Men of Push and Energy.**

The City of Wilmington has made an appropriation of \$150,000 for the purpose of encouraging manufacturing.

**ADVANTAGES OFFERED.**  
Climate favors work the entire year.  
Labor abundant and cheap, living economical.  
Freight rates are low by rail to interior points.  
Shipping rates by steamships and vessels low to all parts of the world.

**NO BETTER POINT FOR PROFITABLE INVESTMENT.**  
We have the raw material in abundance.

**Facts About Wilmington.**  
A seaport city of 25,000 population. An important naval store, cotton and lumber market. Extensive shipping interests. A secure, fresh water harbor. Depth of water on bar 18 feet at mean high water; und. r. government supervision, being continually deepened. Excellent terminal facilities. Four railroads in operation, two in process of construction. Surrounded by attractive summer resorts. Adjacent territory especially adapted to trucking, peach growing, vineyards and rice culture. Damage excellent. Health and climate unsurpassed. An all-the-year-round resort—"THE LONG BRANCH OF THE SOUTH."

Excellent schools and churches of all denominations. A cordial welcome extended to good citizens and men of push and intelligence.

Three banks, with ample banking facilities. Among the manufacturing enterprises now in operation are numbered: Cotton, Pine & Fibre, Wool, Wood Working and Ice Factories, Rice, Flour and Planing Mills, Foundry, Machine Shops, Gas, Electric Light Plants, Cotton Compress, Crooked Lumber, Car and Water Works.

We invite all to come and see, and on the spot to judge for themselves. Wilmington offers excellent hotel accommodations, and a committee of its Chamber of Industry will extend to strangers seeking home and investment cordial greeting and attention.

Persons who may desire fuller information can obtain it by addressing

**The Chamber of Industry, Wilmington, N. C.**

## OXFORD, N. C.

The Capital of Granville County. Situated on three railroads, to which a fourth is in process of construction.

### THE COSMOPOLITAN TOWN OF THE SOUTH

Invites immigration to her hospitable borders.

A family living in Oxford educates boys and girls at home and never flees to the mountains or coast in summer to escape malaria, thus saving thousands to the head of the family.

Mark well its points.

**POINTS.**—It was founded in 1770 by Jesse Benton, father of Hon. Thomas H. Benton, yet it is the newest town in the State, having twice doubled its population in past 10 years.

**EDUCATIONAL.**—It has a large military school and two excellent female colleges, one daily and three weekly papers.

**FINANCIAL.**—Its taxable property is about \$2,000,000, its population 4,000. It has opera and market house, two excellent banks with ample capital.

**INDUSTRIAL.**—It sells eight million pounds of tobacco a year in five mammoth brick warehouses; has four extensive tobacco factories, forty or more leaf factories, two iron foundries, three carriage factories, sash and blind factory, electric-light plant, four hotels, a broom factory, steam flouring mill, cigar factory. The noted Kimball Tobacco Company, of Rochester, N. Y., after surveying the whole tobacco field, selected Oxford as a spot to locate its North Carolina business, and are about to erect a third mammoth building.

**RELIGIOUS.**—Four churches in its midst. **CHARITABLE.**—It boasts of the Oxford Orphan Asylum, two hundred and fifty children well cared for; also lodges of Odd Fellows and Masons.

**CLIMATE.**—It furnishes that equable climate that delights denizens of the North. Annually hundreds come to kill quail in its adjacent fields, or seek health from its pure billy air and mountain water. It has no chills and fever, no malaria, no epidemics.

**ITS BACK COUNTRY AND FUTURE.**—Minerals in great richness and abundance fill the soil of Granville. Copper, iron, gold and silver abound. Capitalists from New York and Pennsylvania and elsewhere are working the mines to great advantage. Its farmers make that smooth, bright, waxy tobacco that only the generous soil of Granville vouchsafes to man—tobacco that improves, like old wine, with age, and is shipped with impunity through the humidity incident to an ocean voyage; and that caused Count Bunsen to exclaim that Granville county tobacco was "the finest on earth, free of nicotine." These tobacco are the highest priced to be found anywhere, bringing often \$1.00 per pound in the leaf. Nestled in the hills of Granville, a very Arcadia, and ideal home among people busy, yet having hearts awaiting with open arms the coming citizen. Riots are unknown, and there are no race problems to solve.

**ACCESSIBILITY.**—Oxford is only two hours from Raleigh, four hours from Richmond, Va., and five hours from Norfolk, Va.

For further information address the Secretary of the Commonwealth Club, Oxford, N. C.

If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$4.00 a year.

## CAMDEN,

The Capital of Kershaw County, South Carolina.

This ancient and historic town is noted for its dry atmosphere, pure water, beautiful scenery, healthful climate and refined society.

It is the center of a rich agricultural country, which contains great natural resources. Hardwoods of many species are abundant, and great forests of long leaf pine, which impregnate the air with terebinthine odors. Several good hotels entertain travelers, and two are carefully conducted for the especial comfort of northern health and pleasure seekers.

Manufacturing of all kinds can be done here advantageously. Two railroads, the South Carolina and the Charleston, Cincinnati & Chicago, furnish transportation to all parts of the country. Two telegraph lines, the Postal and the Western Union, have offices here.

Churches and schools are numerous and well sustained.

A cotton mill company has been organized, and the first installment of twenty per cent. has been called in.

Land is cheap. The climate is salubrious, and subject to no extremes during the year.

Camden invites capitalists, manufacturers, pleasure and health seekers and sportsmen to visit the city and examine the advantages it offers to all.

All inquiries will be promptly answered by the undersigned, official representative of the intendant and warders.

**DR. JOHN W. CORBETT**

Or the President of the Board of Trade.

GEO. T. McWHORTER, Prest., Chickasaw, Ala.

JAS. M. ALLEN, Secretary, Waterloo, Ala.

**Capital Stock \$200,000.**

### THE WATERLOO

## Land, Mining & Mfg. Co.

## WATERLOO, ALA.

(Lauderdale Co.)

Will encourage the location of manufacturing and industrial enterprises in the town of Waterloo by donations of town lots, mineral and timber lands, and stock of the company. Persons who contemplate engaging in enterprises of this character in North Alabama are requested to consider the advantages, present and prospective, of this point before deciding to locate elsewhere. Waterloo is situated on the north bank of the Tennessee river, below Colbert Shoals, consequently at the head of summer navigation on said river. During low-water stage light draft steamers run from Waterloo to Florence, Sheffield and other points above the shoals, freight being transferred at Waterloo. At this season goods may be billed from St. Louis, Cincinnati, Louisville, Evansville and all Western river cities to Waterloo cheaper than any other town in Alabama (Chickasaw excepted). Waterloo is in the heart of the mineral belt, the immense beds of iron ore of Wayne and Lauderdale counties lying in close proximity (5 to 10 miles). Limestone, silica and kaolin are abundant and close. The largest area of virgin forest in North Alabama lies in sight. The Land Company owns large bodies of this, together with many valuable town lots. The water supply is abundant and pure. Scores of springs bubble up within the town limits and the limpid waters of Second Creek wash the eastern border. The health of the community is unexcelled and the cost of living cheap. This is the largest shipping point for tan bark in the State. Present price of bark at landing \$4.50 per cord. Special facilities for tanning leather. The Land Company will donate a large body of fine timber and mineral land in a block to secure the construction of a railroad, north or east from Waterloo, such a road being needed in connection with the unequalled facilities of water transportation enjoyed by the town. Liberal aid will be given to persons who will locate industries here that give employment to labor and add value to raw material.

No matter what you intend to manufacture, consult the Waterloo Land, Mining & Manufacturing Co. and learn what facilities for the prosecution of your business the place enjoys and what inducements will be offered you to come. All questions truthfully and fairly answered.

For further information consult the President, Secretary or Hon. Hiram Richardson, Vice-President, Waterloo, Ala.



### The BOSS

Two Speed

### Boring Machine

No Carpenter should be without this Tool.

**J. H. Osborne & Co.**

UNION CITY, IND.

A Liberal Discount to the Trade.

Write for Circulars and Price List.

## Patent Power Press

For all purposes where

**Great and Uniform**

**PRESSURE**

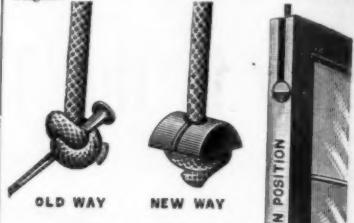
IS REQUIRED.

**JAMES ECCLES,**

**AMBER ST., PHILA., PA.**

—THE DETACHABLE—  
EMPIRE SASH CORD FASTENER.

The simplest and best method of attaching Sash Cords to Window Sashes ever invented, and a great saving in time and patience in putting in or taking out Window Sashes. Every window requires them that is hung with weights.



The sharp rib extending over the top of the fastener, through the centre, is, by the weight of the sash, caused to grip into the frame so firmly as to prevent its moving. The most useful invention for Window Sash ever put on the market. Every window requires them.

Reason why you should use them: It costs less than one and one-half cents per sash; requires no nails or screws; can be put in or taken out in less than one minute; prevents sash from running back and forth between the sash and frame; does not split the sash like nails or screws; protects the cord from running back into the weight pocket. Manufactured by the

**EMPIRE PORTABLE FORGE CO., LANSDOWNE, N. Y., U. S. A.**

## The Osborn COTTON GIN Lubricator.

PATENTED.

Consists in the application of oil to cotton being ginned. The quality of the cotton is thereby improved. The friction of the ginning operation is reduced. There is less breakage of the fibre, and consequently a greater average length of staple. The gin saws are prevented from gumming, gin cutting is obviated and the liability of fire from friction is diminished. The above are some of the advantages resulting from the use of this improvement. Territory for sale. Agents wanted. Apply to

**C. H. MERRY,**  
TAZOO CITY, MISS.

## FIFTY YEARS in the MARKET.



## IT HAS NO SUPERIOR FOR USE IN CONSTRUCTING BRIDGES, IRON FURNACES

And All Work Where Great Strength is Required.

100,000 Barrels used by U. S. Government in Washington.

150,000 Barrels used by Baltimore & O to R. R.

50,000 Barrels used by Pennsylvania R. R.

10,000 Barrels used in Constructing Wheeling Bridge.

### ONE MILLION BARRELS USED

On many important buildings throughout the country. Extensively used in Maryland, Virginia, West Virginia, Pennsylvania, Ohio.

### Prompt Shipments.

### Low Freight Rates.

Descriptive Pamphlet free upon application.

### WORKS, - - CUMBERLAND, MD.

Address all inquiries to Sales Office, 67 William St., P. O. Box 2713, New York City.

**M. ALBERT SCULL,**  
**ERNEST R. ACKERMAN,** General Sales Agents.

## Chattanooga Paint Company, CHATTANOOGA, TENN.

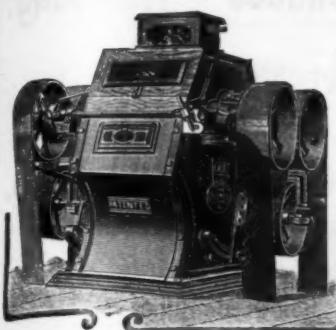
Manufacturers of the

### «BEST OXIDE OF IRON PAINT MADE IN THE UNITED STATES.»

Over 18,000 tons made since 1880. 3,000 tons made in 1888. Over 500 certificates regarding its qualities. Either dry or mixed ready for use.

SEND FOR PRICES. DELIVERED AT POINT OF DESTINATION

# Read What a New York Miller Says of the Case Company.



OFFICE OF PETER SNYDER,  
DEALER IN FLOUR, FEED AND LUMBER,

MANLIUS STATION, N. Y., October 28, 1869.

*The Case Manufacturing Company, Columbus, Ohio:*

GENTLEMEN: After running my mill over two months, I feel it my duty and in justice to you to state that I am more than pleased with the mill you built for me. It started like a clock "from the word go". My flour is discounting the fanciest brands of flour in the market. My clean-up is equal to any mill in the State. I will say that the Case Rolls and Flour Dressers cannot be beaten in the world for light running and ease of access to all their parts. I would advise any miller building a new mill or remodeling an old one to place their contract with the Case Company.

Thanking you for the prompt and efficient manner in which you furnished my machinery in so short a time, after so great a loss and damage by fire burning your works, and with the best of wishes I remain,

Yours respectfully,

PETER SNYDER.

For full particulars regarding the best FLOUR OR CORN MILL MACHINERY, address

## THE CASE MANUFACTURING CO., Columbus, Ohio.

### A NEW FIELD

For Men of Moderate Means, in the Great Craig Mineral Region, of Virginia.

The West Salem Land Co. Makes an Offer of Stock Based Upon Town Property at New Castle.

### A GOOD INVESTMENT

SALEM, VA., March 22, 1869.

(Spec. corresp'dence MANUFACTURERS' RECORD.) Salem is not only a place of immense activity in local development, but is becoming a head center for the development of the vast back country which recently projected railroads will soon open up to the investment-seeking world. If the reader will take one of those new maps of Virginia, which show the Flat Top coal district, extending from the Chesapeake & Ohio Railroad on the north to a branch of the Norfolk & Western on the south, it will be readily seen that the town of New Castle, the county seat of Craig, is a natural ally of the town of Salem: and when it is known that probably the richest iron ore district in Virginia surrounds this town of New Castle, the question is likely to arise whether or not New Castle may not prove a rival not only of Salem, but of Roanoke.

However that may be, it is certain that New Castle is a point worthy of attention from men who wish to make money by getting in at the start instead of waiting for the finish. The fact that the West Salem Land Co., whose way of handling its "series B" proved so remunerative to the stockholders of that series, has recently purchased several tracts of land, to be opened into town lots in the vicinage of New Castle, makes it appropriate to say a word concerning the prospects at the latter place.

The Chesapeake & Ohio Railway people, recognizing the possibilities of the Craig mineral region, some months ago resolved to build a line from Eagle mountain, in Botetourt county, up Craig's creek to New Castle. The day this road shall be finished New Castle will become almost a second Middlesborough; for I am told that Col. Decatur Axtell, the president of the Craig Branch of the C. & O., states that there is enough high grade brown iron ore in the district to last a 100 big furnaces at least a century. That may be saying too much, but as I stated in my last letter concerning the resources of the new city of Glasgow, there is no doubt about either the quality or quantity, for all practical purposes, of the ores in the vicinage of New Castle.

This region has remained so long undeveloped, not at all by reason of any doubt as to its resources, but because of its inaccessibility. The new railroad from Eagle mountain (formerly called Eagle Rock)

will be completed by September 1, 1869.

Now the West Salem Land Co., whose charter authorizes the handling of properties not only in the county of Roanoke but in the adjoining counties, knowing that the resources in the vicinity of New Castle would be developed so soon as the railroad above mentioned should be completed, took time by the forelock and secured some of the most desirable ground close to the courthouse. A portion of this lies along the approach of the new railroad, and the entire holding, I am informed, lies within a few hundred yards of the center of the town. And New Castle is the natural town site of this region.

The property has been capitalized at a low figure and the bulk of the stock has been taken by a few far-seeing men. There remain, however, \$40,000 worth, which is offered to the general public. The scheme, as in the other series of stock floated by this company, appeals particularly to the wants of men of moderate means. The shares are of a par value of \$10, and only \$5 in money is required, and this may be paid in monthly installments of \$1 each. So soon as \$5 shall have been paid a share of stock, full-paid and non-assessable, will be issued, and the chances are it will prove as good an investment as the stock of "Series B," recently floated by this same company.

The time to invest is at the beginning of new towns, and a word to the wise is sufficient.

THOMAS P. GRASBY.

### New Enterprises at Greensboro.

GREENSBORO, N. C., March 25, 1869.  
*Editor Manufacturers' Record:*

Not through accident has Greensboro attained its present prominence before the outside world. Nature's generosity and her unexcelled railroad facilities have for years been common talk among strangers and others visiting this section. She is the great railroad center of North Carolina. Not less than 22 passenger and more than 100 freight trains arrive at and depart from her depots each 24 hours. She is surrounded by inexhaustible beds of coal, iron, lime, kaolin and soapstone, besides an endless variety of timber for the manufacture of spokes, rims, hubs, bobbins, wagons, carriages and furniture. Greensboro is steadily and rapidly increasing in population, wealth, manufactures and trade.

More than \$2,000,000 have been invested in new enterprises in this thriving and progressive city within the past 12 months, and not less than half a million dollars' worth of real estate has changed hands since the 1st of January.

Below will be found a list of new enterprises organized during the past year, all save two of which are now in full operation, and stock is being subscribed to a number of others:

The North Carolina Steel & Iron Co., capital \$1,000,000; J. A. Odell, president;

S. H. Wiley, secretary and treasurer; J. J. Newman, superintendent.

The Greensborough Cotton Mills, capital \$100,000; T. C. Worth, president; J. W. Fry, vice president; H. J. Elam, secretary and treasurer.

The Crown Cotton Mills, capital \$100,000; Amos Ragan, president; R. E. Causey, secretary and treasurer.

The Bank of Guilford, authorized capital \$200,000; paid-up capital, \$100,000; D. F. Caldwell, president; W. R. Murray, vice-president; W. B. Bogart, cashier.

The Piedmont Bank, capital \$100,000; A. M. Scales, president; J. M. Winstead, cashier; R. M. Douglas, attorney.

The Greensboro Land & Improvement Co., capital \$200,000; J. A. Odell, president; Neil Ellington, secretary and treasurer.

The Greensboro Land & Security Co., capital \$250,000; J. T. Tate, C. W. Tate, W. P. Bynum and E. W. Tate, incorporators.

The South Piedmont Land & Manufacturing Co., capital \$50,000; R. T. Gray, president; E. P. Wharton, secretary and treasurer.

The Guilford Lumber Co., capital \$50,000; C. A. Reynolds, president; A. W. McAlister, secretary and treasurer.

The Greensboro Knitting Mills, capital \$50,000; J. W. Scott, president; J. K. Hall, secretary, treasurer and manager.

The Eagle Foundry, reorganized, capital \$30,000; W. J. Teague, secretary and treasurer; J. D. Donnell, manager.

The Greensboro Brick & Tiling Co., capital \$10,000; Thomas Woodroffe, president; Geo. T. Ferrell, secretary and treasurer; Samuel Brown, manager.

The Oak Hill Corn & Grist Mills, capital \$5,000; L. F. Ross, proprietor.

The Greensboro Transparent Ice Co., — Hines, manager.

An electric-light plant, water works, Belgian block pavements and a sewerage system are among the many improvements made in the city.

Contracts have been let for two fine church buildings, one for the First Presbyterian congregation, and the other for the Methodist Protestant denomination. Many storehouses and dwellings have been contracted for.

Stock is now being subscribed to a wagon factory, a patent roller flour mill and a number of smaller enterprises.

As Col. J. H. Myrover has cleverly said, "the people of Greensboro are impulsive and warm-hearted, and hospitality to the stranger within their gates is to them an obligation as sacred as to the Arab in his tent. They never seem so happy as when welcoming and entertaining an assemblage of visitors;" and while it would be difficult to imagine her citizens, in the vortex of a feverish "boom," losing their heads over new methods and new ideas, it would still be more difficult to imagine them given over to indifference and apathy in the face of the progress that is now being made within her borders.

H. J. ELAM.

### An Alleged Steel Revolution.

A new discovery is announced that, if all claimed for it by the inventor is true, will effect a revolution in the steel-tool industry. Mr. F. G. Bates, of Philadelphia, claims to take the run of the scrap heap, from scrap iron to Bessemer steel, wrought or cast iron indifferently. This he puts through a single process with only one heating and no melting at all and produces a steel that will take a higher temper, a finer polish and show a better grain than any other steel in the world.

The New York Commercial Advertiser, in noticing this invention, says:

"The great importance of this discovery lies in its simplicity and consequent cheapness. Heretofore tool steel has been made from crucible steel, which has to be melted, and some idea of the trouble and expense involved may be gained from the statement that much of the finer grade of steel used in this country is made from English blister steel, which is itself made from Norway wrought iron by a process that requires from two to three weeks' time. Even then it is too soft for tools and has to be converted into crucible steel by another expensive process. Inch bars of the same iron are converted into the finest kind of tool steel by the Bates process in twenty-four hours by one operation."

As will be readily seen, the possibilities of such an invention are infinite. One of the first results expected is that the \$50,000,000 now annually sent abroad for steel billets from which to make wire will be kept at home. Another is a marked improvement in car wheels.

Still another is the manufacture of armor plates for iron or rather steel-clad vessels. At present there is no way of securing hardness and toughness in the same plate; the nearest approach to it being an inner skin of tough steel and an outer one of hardened steel. Even the boring of rivet holes in this mass is a work of immense labor and expense. Mr. Bates proposes to make plates of mild steel, bore them while in that state, when it can be done cheaply and easily, and then harden the outer surface, a process which, it is calculated, will increase the plates' resistance to the blow of a shot at least 25 per cent."

A COMPLETE planing-mill outfit that has been run only one year, and that has been kept in the best of running order, is offered for sale in our advertising columns by Snowden & Atlee, 906 Richmond street, Philadelphia. Liberal terms for payment in trade are offered.

E. V. COOPER, Autreyville, N. C., desires the address of lumber dealers; also price-lists of different grades of lumber.

If you are not already a subscriber to the MANUFACTURERS' RECORD, send us \$4 and you will receive it regularly for one year or six months for \$2.00.

## The Markets.

OFFICE MANUFACTURERS' RECORD,  
BALTIMORE, March 25, 1890.

Not for 12 months past has the iron trade been in so unsettled a condition as at present. Those who attempt to assign reasons for the present state of things are not very successful in doing so. There is an enormous consumption in progress; an enormous consumption is assured for the entire year. There are no large stocks of iron or steel material of any kind. New enterprises are looming up by the score, and new channels for the consumption of mill and furnace products are constantly opening. But in the face of all this, the markets in all parts of the country have been declining steadily for weeks, and within the past week a pronounced drop has occurred. Some iron authorities now claim that bottom has been reached, and that symptoms of an upward turn are visible, but it is a little too soon to make this assertion positively. Before an upward tendency sets in there will be heavy transactions closed, and makers of iron now believe that any day may precipitate a crisis; by that they mean that large buyers, who have been holding off for weeks past, may suddenly place their orders on the market and secure supplies at present quotations. This will give makers an opportunity to realize better prices only when the small buyers, who always bring up the rear, come in to make their purchases.

What the country wants to know is not so much the causes of the present depressed condition of the iron trade in the face of such encouragements, but rather when and where the downward tendency will stop. It has been said frequently in these columns that it is the unexpected that always happens in the iron trade. Thirty to 60 days ago no one anticipated such a break in prices as has occurred. Every fact, every circumstance, in January indicated a steady advance in prices up to April 1st. Even now, when prices are at such a low point, buyers are holding aloof, only picking up small lots here and there. What does this mean?

Buyers generally were surprised at the advance which took place last fall. In consequence of that advance, freights, labor, coke and coal advanced in price and remain at the higher rate, and consequently there is no room for a decline of prices to last summer's figures. Notwithstanding that fact, instances were quite common last week of sales of No. 1 foundry iron at New York and Philadelphia at \$19; in various Atlantic markets forge iron has sold at \$16.50; bar iron dropped to 1.80 and 1.90; plate iron has sold as low as 2.05 and 2.10; angles and tees were also shaded, but beams and channels remain at combination rates. Steel rails have dropped to \$34 and \$34.50, and last week's transactions foot up some 22,000 or 23,000 tons. Billets and slabs have been dropping, and prices are now quoted somewhere between \$32 and \$33.50. Negotiations are progressing between large buyers and makers, but up to this writing transactions have not been closed.

All through the West there is only a moderate degree of activity; buyers are holding off until assured that the prices they pay will be the lowest. There are rumors from the South that a further drop will take place, and that accounts for the light business in Ohio valley markets. Large transactions in Bessemer iron have been reported at very low prices. The Cleveland ore market is active.

In Western Pennsylvania mills are running full time, but not under very heavy pressure.

At Chicago the low price to which coke iron has fallen within the past week or two has not led to much business.

The sheet and pipe mills in all parts of the country are running full time. The structural iron interests have excellent prospects, but no business of importance has been reported recently. The general activity in building has increased the demand for nails. The adoption of the Western schedule by Eastern makers harmonizes methods of buying throughout the country.

The entire iron trade is anxiously awaiting developments. Buyers, knowing that they have very little material on hand, are anxious to protect themselves against an advance, and will do so upon the first signal that the market is recovering its strength.

Railroad building enterprises are still kept under cover. An immense amount of general construction work is about being undertaken, and it is quite safe to presume that during the spring and summer the demand for all mill and furnace products will be heavy.

### HARDWARE.

There are no changes to report since our last issue. The volume of business continues very satisfactory, and prices are being maintained, hence we can report a very favorable outlook.

Capitalists and small investors read "War" Robertson's advertisement in this paper.

**AMERICAN**  
**PIG IRON Storage Warrant Co.**

(Bank of America Building.)

44 Wall Street, NEW YORK.  
Correspondence of Furnaces Invited.

**DIXON'S**  
DRY GRAPHITE  
or  
GRAPHITE GREASE  
"are the only things that will keep cool journals on High-Speed Wood-Working Tools." So say many who have tried them.  
JOSEPH DIXON CRUCIBLE CO., JERSEY CITY, N. J.

**PICKARDS, MATHER & CO.**  
**Pig Iron, Iron Ore and Coal.**  
Perry-Payne Building.  
CLEVELAND, OHIO.

**EDWARD ALLEN,**  
Practical Lead Burner  
BALTIMORE, MD.

Sulphuric Acid Chambers constructed on the latest improved plan. Strict attention given to the Lead Works of Concentrating Apparatus.  
P. O. BOX 329. ESTIMATES FOR THE ABOVE GIVEN.

**FAST TRAIN LINE.**

**Cleveland and Canton R. R. Co.**

Newly Rebuilt to Standard Gauge.

New & Elegant Pullman Palace Cars. Heated by steam from the locomotive. No Stoves! No Danger from Fire!

Three fast trains each way daily between Cleveland and Canton. Two fast trains each way daily between Cleveland and Zanesville. No change of cars between Cleveland and Zanesville.

J. W. WARDWELL, Gen. Supt.  
ALBERT ROKUSEK, Gen. Pas. Agt.

Look Carefully through this paper and you may find an advertisement of some machinery or other goods that you are in need of. Preserve this copy for future reference.

## Philadelphia x Warehouse x Company,

No. 235 Dock Street, Philadelphia.

**CAPITAL, \$1,000,000, FULL PAID.**

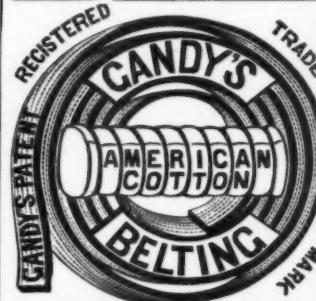
This Company makes advances upon Pig Iron stored at Furnaces (storage charge being nominal) or in Public Warehouses, upon reasonable terms. Particulars upon Application.

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Sec. and Treas.

R. H. PILE,  
Superintendent.

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HARRY F. WEST,  
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**The "Original Gandy"**

Sewed Cotton Duck Belting.

Especially adapted for Main Drivers, Saw Mills, Cotton Gins, Cotton Presses, and all places where belts are subjected to moisture or atmospheric changes, the "GANDY" stands paramount.

For further information, prices, etc., write

**The Gandy Belting Co.**  
BALTIMORE, MD.

SOUTHERN AGENTS: Smith & Courtney, Richmond, Va.; Atlanta Rubber Co., Atlanta, Ga.; Baker, Sloo & Co., New Orleans, La.



The Only Manufacturers of Raw Hide Belting in the Country.

**The Chicago Rawhide Mfg. Co.**

MANUFACTURERS OF  
**RAWHIDE BELTING, LACE LEATHER,**

**ROPE, LARIATS, FLY-NETS,**

Picker Leather, Stock and Farm Whips, Washers, Hame Straps, Hame Strings, Halters and other Rawhide Goods of all kinds, by Krueger's Patent.

This Belting and Lace Leather is not affected by steam or dampness; has more grip than any other; never becomes hard; is stronger, more durable and the most economical Belting made. Especially adapted for the Southern trade on account of its resistance to moisture. The Rawhide Rope for Round Belting Transmission is SUPERIOR TO ALL OTHERS.

73 and 75 OHIO STREET, CHICAGO, ILL.



**EXAMINE! READ!****Terms Easy and to Suit Buyers.**

The Most Perfect  
**Dry Kiln**

IMPROVED OVER ALL OTHERS.

Send for particulars.



THE AKRON IMPROVED  
**DRY KILN.**

More Practical, Economical and Efficient than any other.

RESULTS GUARANTEED. LOW PRICES.

MANUFACTURED BY

**The Akron Heating & Ventilating Co.**

117 CHURCH STREET,

AKRON, OHIO.

Pennsylvania Agricultural Works, York, Pa.  
Farquhar's Standard Engines and Saw Mills.  
Send for Catalogue. Portable, Stationary, Traction and Automatic Engines especially. Warranted equal to any made.



Address A. R. FARQUHAR &amp; SON, York, Pa.

**VAILE & YOUNG'S**  
**Patent Metallic Skylights.**

*Without Putty.*  
Construction adapted to all forms and styles of Skylights. Thousands of feet in use have proved its superiority. Particularly adapted for Deposits, Mills, Factories, etc., where large and continuous lights are required. Send for illustrated catalogue.

309 &amp; 311 NORTH STREET, BALTIMORE, MD.

**VENTILATORS**

Made of galvanized iron and copper. Strong up wind draft. Excellent for rooms, garages, stables, barns, mills, stores and dwellings; cures smoky chimneys. Perfectly storm-proof.

(Galvanized iron and copper cornices and gutters, sheet metal work for buildings. Send for illustrated circular.)

E. VAN NOORDEN & CO.,  
383 Harrison Ave., BOSTON, Mass.

**McShane & Bell Foundry**

Fine Iron and Brass Castings Made to Order.

Manufacture those celebrated Bells for Tower Clocks, Court-Houses, Cotton Mills, Factories, &amp;c. Prices and catalogues sent free. Address

H. McSHANE & CO.,  
Baltimore, Md.

Mention this Paper.

**THE S. OBERMAYER FOUNDRY SUPPLY MFG. CO.****Foundry Facings.****Foundry Supplies.**

IMPORTERS AND REFINERS OF

**GRAPHITE OR BLACK LEAD.**

AND

Lubricating Plumbago.

NO CHARGE FOR TRIAL SAMPLES.

SHIPERS OF ALL KINDS OF

Molding Sands,

MONK'S MOLDERS' TOOLS.

Cincinnati, O., U.S.A.

Write for Illustrated Catalogue and Price List.

**B. F. STURTEVANT,**

PATENTEE AND SOLE MANUFACTURER OF

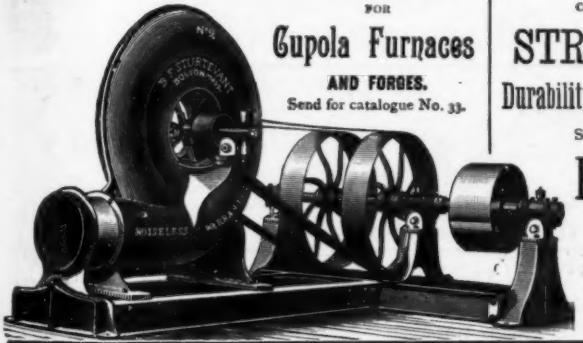
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in practical operation converts crude petroleum into a fixed or non condensable gas for illumination or fuel. The attention of gas companies is called to this process, as by its adoption they will be able to produce a light of equal brilliancy to that of the electric light, and at less cost than by any other process. Manufacturers will find this the fuel with which to compete with natural gas.

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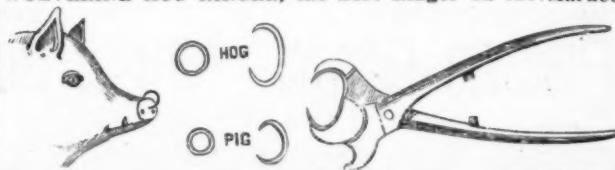
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This roofing is specially recommended to owners of city and country property; it can be applied without the aid of skilled labor. Everyone can be his own roofer at very small cost. We put on this roofing when it is desired.

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Is the most Elastic, Durable and Economical Paint known for Tin Roofs, Smoke Stacks, Boilers, Boiler Fronts, Bridges and all metal and wood surfaces. It is fire-proof, water-proof and acid-proof; it resists all rust as well as acid and smoke fumes; it will not peel, crack or blister. Especially adapted for making walls and northeast exposures water-proof. Bricks painted with two coats of this compound will resist a water pressure of 200 pounds to the square inch. The same applies to cement and mortar work. Send for prices and further information.

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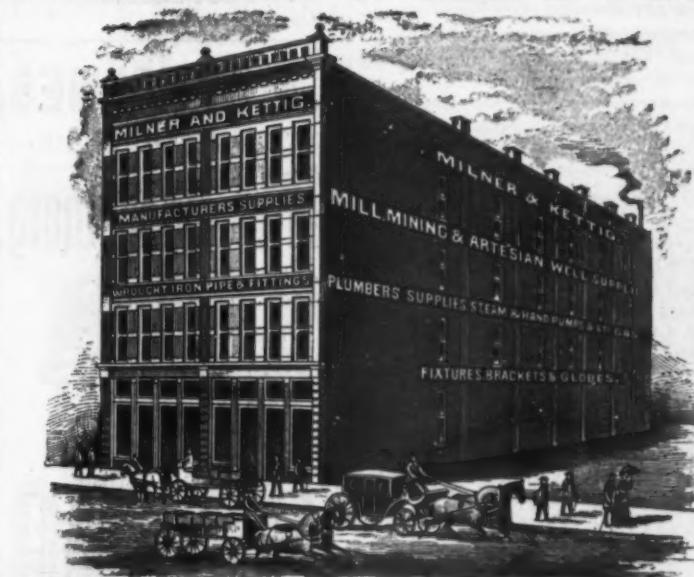
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OFFICE—No. 14 W. German St., BALTIMORE, MD.



## Eastern Lumber Markets.

[Spec. correspondence MANUFACTURERS' RECORD.]  
NEW YORK, March 25, 1890.

A list of lumber quotations this week would show no particular change in prices. It is intimated that large retail buyers of hemlock and Northwestern lumber have recently been favored with concessions, and, so far as white pine is concerned, this is probably true, as representatives of Western concerns have been working Eastern markets quite actively to protect their interests and beat their competitors. An immense amount of building material of all kinds is being bought. Hemlock yard sizes have been advanced to about \$12, but in spite of this, rumors of a cutting of rates are already heard. As usual, weak parties who are anxious for business, have taken advantage of the efforts of the stronger concerns to advance prices, to sell under them. A large amount of white pine has already been sold in Eastern markets. There is great activity in yellow pine, North Carolina pine, cypress shingles, laths of all kinds and in all the hardwoods. With reference to hardwoods, it is stated that there will be larger shipments this year on account of the abundant supply of logs because of the recent floods. Be the reason what it may, the fact that a large quantity of logs will be available has been the pretext for "bear" rumors concerning prices. Such statements as these, however, do not have much effect, except among wholesalers. No matter how things go, retailers and builders are obliged to pay about the same prices for lumber.

The movement in white pine at several of our larger yards has been very active. Builders are anxious either to secure the acceptance of contracts for the next three months or to have the assurance that they will not be obliged to pay more than present quotations. This assurance is being extended in a good many instances, whether it means anything or not.

Heavy supplies are being received from North Carolina, and all the mills there are reported to be oversold.

We are working off considerable supplies of maple boards and plank. There is a scarcity of cherry in this market, at least, of the kind that commands high prices; cull stuff is plenty. There is a good deal of birch here; ash sales have been large since the first of the month, and a good deal of stuff is coming in. Some little elm is selling. Poplar firsts and seconds command good prices; everything delivered here finds ready sale. Complaints are frequently heard in this, as well as in other Northern markets, as to the scarcity of rift flooring.

The planing mill business is in better condition than for some time, but only those mills are succeeding which have adapted their capacity to suit certain local requirements. The Eastern planing mill interests have had a hard struggle of it for years past, and it is only where they have patiently dug out their own channel of trade, so to speak, that they are on a good laying basis.

S. A. TERRENCE, of Walbridge & Co., Buffalo, N. Y., wants information regarding the number and location of manufacturers of wooden butter dishes, etc.; also the demand for products.

**ALCOTT**  
IMPROVED TURBINE  
WATER WHEELS.  
MOUNT HOLLY, N. J.

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Prime Chestnut and Linn Shingles; also quarter-sawed Oak and Chestnut Lumber in large quantities for sale by KEARNEY, ENGLISH & POLLOCK, Stony Man, Va.

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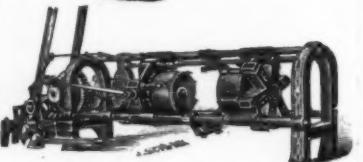
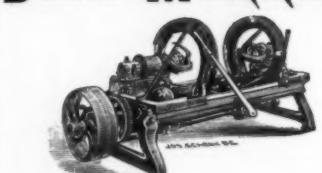
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In Mineral or Timber Lands in Eastern Kentucky West Virginia and the South-western part of Old Virginia, or in lots and acre property in or near the mineral and timber lands of the two states, will pay over 10 Per Cent. Capitalists and small investors address W. A. R. ROBERTSON, Attorney & Counsellor-at-Law, Wall St., New York.

10% 10%

**Notice to Contractors, Builders and Brick-makers.**

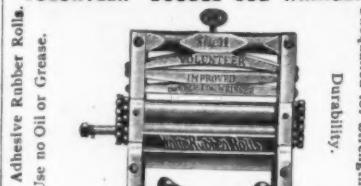
The undersigned desire to erect Cotton Warehouses at Yazoo City. From three to four million bricks will be needed this summer. No brickyard here in operation nor are there any contractors. Address

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Also "Empire" and "Daisy" Wringers, Cl ths Dryng Ba's, etc. Dealers, write for catalogue of Wringers (all kinds); also, Folding Wash Benches, Clothes Dryers, Cot Beds, Hammock Standards, Swings, &c., to **EMPIRE WRINGER CO. AUBURN N. Y.**

I have used the ECK STROM (No. 3) VENTILATOR with such uniform success in different kitchens that I would as soon think of omitting a window as to omit it in my specifications.

Yours very truly,

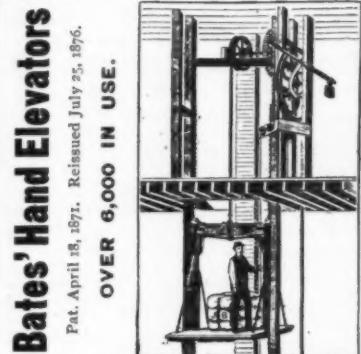
C. T. FREIJS.

For particulars send to

Cheney & Hewett,

201 Broadway, N. Y.

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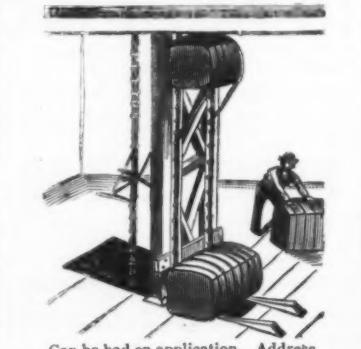


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8x2 1/2	1 10 1/2	7	1 75	3 50	4 50
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Send for April (1890) Catalogue.

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SCREW JACKS,

AND BENCH VISSES.

50 varieties of Lever and Screw

Jacks for railroad use.

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Agents wanted for the State of Maryland and all unclaimed territory in the South.

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PURE WATER FROM IRON RUSTLESS PIPES  
The best for conveying water.

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**GRAND RIVERS, KY.****A New Iron-Making Town.**

**Abundance of Raw Material in Juxtaposition—Exceptional Transportation Advantages.**

GRAND RIVERS, KY., March 17, 1890.  
*Editor Manufacturers' Record:*

Like all new cities in embryo, we are in a period of transition here. All is excitement and activity. Surveyors and engineers are busy with their compasses, tripodods and chains. Our streets are being rapidly laid out and graded, and we are fast getting all things in readiness for the expected opening to the public and sale of city lots, which is to commence April 2d, and continue three days. Much interest is felt here, as indeed over the whole country, and extensive preparations are being made to accommodate the crowd of buyers, which circumstances indicate will be here.

As the city of Grand Rivers no longer exists upon paper only, we are now coming well to the front, and command the attention of investors and capitalists. Already the Grand Rivers Co. has commenced operations for the erection of two charcoal furnaces upon a site selected by a commission of mining engineers, located at a point almost within a rifle shot of all the elements which enter into the manufacture of charcoal iron. The furnaces, iron ore, lime rock, water, timber and rivers are practically in juxtaposition.

The immense deposits and bold outcroppings of brown hematite iron ore, the farthest limits of which are but  $2\frac{1}{2}$  miles from our furnace sites, the rivers for transporting to our furnaces the timber for charcoal from hundreds of miles of heavily wooded shores, our near access to the markets of the country, all unite in making this location phenomenal. If Sheffield can boast of its first shipment of 5,000 tons of pig iron to Pittsburgh at a saving of \$2.40 per ton, what can we do, located some 600 miles nearer this market and upon waters always navigable?

It is a fact well known to the residents about here, and of court record as well, that upon this property the so-called Bessemer process was first discovered by William Kelley. [See Daddow's "Coal, Iron and Oil," page 637]. Then followed the celebrated trial of interference, Kelley vs. Bessemer, which resulted in a patent being issued to Kelley. Later a suit in the courts resulted in a compromise, whereby Kelley received a royalty upon all steel manufactured by Bessemer during the entire term of the patent.

A site has been selected for the company's building. A two-story brick block, 100 feet in length, will be immediately constructed. Other building operations are only waiting for the company to grant locations. The company has ample capital to insure the rapid building up of large industries, and outside capital stands ready for early investment.

There is a great significance in the name "Grand Rivers," which has been given to this new city. It needs no prophet to foretell its future, for on every hand are evidences that it will be all that the name implies. Nature has plainly marked this location with innumerable advantages which destine it to become one of the most important manufacturing centers in the New South. The city is situated directly between the Tennessee and Cumberland rivers, just above their junction with the Ohio, and these rivers, which furnish great water highways through an immense country to the south and east, will be utilized to develop its wonderful natural resources and distribute the products of its varied industries.

It is certainly marvelous that keen-eyed capitalists have been so obtuse to the unique position enjoyed by this section in regard to commercial routes when considered in connection with the magnificent gifts and advantages which Nature has bestowed in the way of untold mineral deposits and timber wealth. If, however, our wonder is excited that this locality could have lain for such an indefinite period in a chrysalis state, it is now newly awakened by the earnestness and vim which the "Grand Rivers Company" is now manifesting in bringing to public attention the phenomenal natural growth of this fertile garden of the New South.

The company owns some 24,000 acres coal, iron, timber and city land, most of which is heavily covered with a magnificent growth of hardwood, consisting of hickory, maple, beech, birch, poplar, chestnut, walnut, with a variety of oaks, all of which can be easily and economically shipped to an indefinite range of markets.

The mineral lands consist of 18,000 acres of brown hematite iron ore banks, existing in gigantic boulders weighing a thousand or more tons, claimed to be the largest exposed exhibition of brown hematite iron ore yet discovered in this country.

The coal lands consist of 3,000 acres. The coal upon this land is practically inexhaustible, its measures, 11 in number, ranging from 4 to 7 feet in thickness. This coal, it is said, has been found to possess superior qualities as a coking, steaming and domestic coal.

There are many points in the South, each claiming that by juxtaposition of the prime materials they can produce the cheapest iron, where the freight question is the great determining item. Grand Rivers by situation can obviously sell iron at St. Louis and other markets cheaper than places not enjoying her transportation advantages. The great Southwestern railway system is made tributary to Grand Rivers, with no chance for monopoly on freight, for the Cumberland and Tennessee rivers are in practical competition.

From a general survey of the many excellent opportunities for profitable investment in the New South, it is evident that nothing in the way of inducements offered can be more satisfactory than those presented by the Grand Rivers Company.

X. Y. Z.

THE Cape Fear and Yadkin Valley Edition of the Wilmington Messenger, just out, is one of those large exhibits of enterprise in which Manager Benito delights. Profusely illustrated, filled with descriptive reading, it is calculated to attract much attention to North Carolina's flourishing seaport city, and to the rich, natural resources of the great and much of it undeveloped territory that this new road traverses. It is worth everything to a community to have a live paper like the Messenger, a fact that the people of Wilmington seem thoroughly to appreciate.

IT is stated that a cash transaction in real estate amounting to over \$100,000 was executed by two of the directors of the Grand Rivers Co., of Grand Rivers, Ky., in the interest of that company during the past week.

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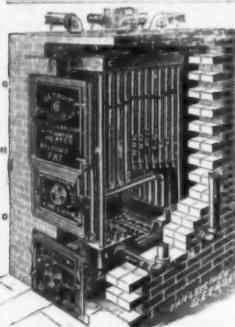
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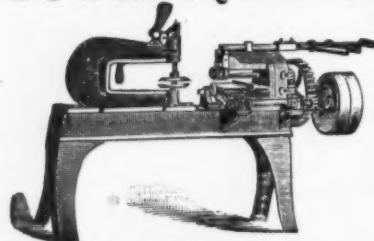
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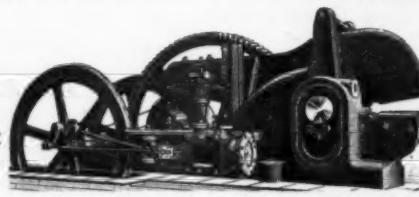
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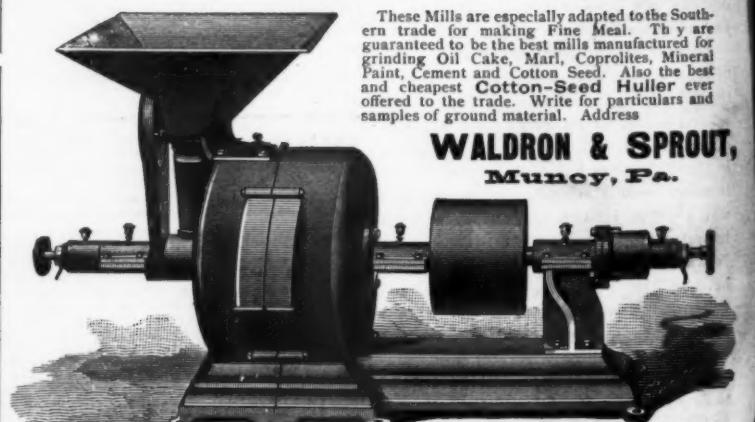
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# Alphabetical Index of Advertisers.

[FOR "CLASSIFIED INDEX," SEE PAGE 2.]

A	Curtis Regulator Co. ....	34
Adam, S., & Sons.....		
Albion Belting Co. ....	77	
Albion Heating & Vent. Co. ....	71	
Alcott, T. C. & Son. ....	74	
Allen, Edw. ....	70	
Allentown Fdry. & Mach. Co. ....	30	
Alley Water Tube Boiler Co. ....	75	
American Development Co. ....	38	
"American Economist" ....	54	
American Gas Saving Co. ....	72	
American Pig Iron Storage War- rap Co. ....	70	
American Supply Co. ....	70	
Anderson Fdy. & Mach. Works. ....	60	
Arctic Ice Machine Mfg. Co. ....	35	
Armstrong Bros. ....	35	
Arnold, D. J. C. ....	51	
Ashton Valve Co. ....	34	
Atlanta Machine Works. ....	53	
Ash & Viborg. ....	54	
B	Eagle Iron Works. ....	57
Earle, T. K., Mfg. Co. ....	32	
Eastman Co. ....	38	
Eccles, Jas. ....	68	
Eclipse Pump Mfg. Co. ....	53	
Eclipse Wind Engine Co. ....	53	
Eddy, Chas. G. ....	55	
Edmonds, Elias. ....	45	
Egan Co., The. ....	50	
Ehret-Warren Mfg. Co. ....	50	
Ely & Deming. ....	46	
Empire Paint & Roofing Co. ....	68	
Empire Portable Forge Co. ....	68	
Employers' Liability Assurance Corporation, (Limited). ....	74	
Estep, F. A. ....	46	
E. T. V. & G. Ry. ....	55	
Eureka Brick Mch. Mfg. Co. ....	53	
Evans Friction Cone Co. ....	53	
F	Fahy, Thos. ....	47
Farquhar, S. B. & Son. ....	51	
Fay, J. A., & Co. ....	49	
Felthousen & Sherwood. ....	34	
Fisher, E. W. ....	75	
Fitzsimons & Co. ....	59	
Fletcher & Thomas. ....	51	
Florence, Ala. ....	34	
Forsyth, S. C., Machine Co. ....	35	
Fort Payne, Ala. ....	74	
Fort Payne Basket & Pkg. Co. ....	45	
Foster, J. M. ....	45	
Foundry & Machine Department Harrisburg Car Mfg. Co. ....	35	
Frank & Co. ....	40	
Frey-Sheckler Co. ....	72	
Frick Co. ....	33	
Frisbie Lucop Mill Co. ....	45	
Fritz, Geo. J. ....	55	
Fulton Iron & Engine Works. ....	80	
G	Gambrill, C. A., Mfg. Co. ....	54
Gandy Belting Co. ....	70	
Gates Iron Works. ....	56	
Gerlach, Peter & Co. ....	48	
Giamorgan Co., The. ....	31	
Glasgow, Va. ....	63	
Glen Cove Machine Co., (Lim.). ....	44	
Globe Machine Co. ....	75	
Globe Iron Roofing & Cor. Co. ....	32	
Godfrey & Co., L. ....	46	
Goodell & Waters. ....	50	
Goodhart, P. J. & Co. ....	38	
Gordon Steam Pump Co. ....	4*	
Gordon, Strobel & Laurent (Lim.). ....	52	
Gouds Mfg. Co. ....	36	
Graham, J. S., & Co. ....	48	
Graham, Va. ....	65	
Graham Vise Wrench Co. ....	72	
Grand Rivers, Ky. ....	72	
Greene & Wood Mfg. Co. ....	32	
Greer, R. ....	45	
Gump, A. W., & Co. ....	75	
Haines, Jones & Cadbury Co. ....	73	
Haralson & Murray. ....	31	
Harrington, E., Son & Co. ....	75	
Harrington & King Perform. Co. ....	30	
Harris, A. W., Oil Co. ....	35	
Harris, N. W., & Co. ....	35	
Harris, J. W. ....	36	
Harris, Wm. A., Steam Eng. Co. ....	33	
Harrison Safety Boiler Works. ....	33	
Hartford Steam Boiler Inspection & Insurance Co. ....	54	
Heesen Bros. & Co. ....	72	
Herald Publishing Co. ....	45	
Hercules Iron Works. ....	45	
Heine Safety Boiler Co. ....	45	
Heisler Electric Light Co. ....	78	
Hewes & Phillips Iron Works. ....	33	
Hili Clutch Works. ....	53	
Holmes, E. & B. ....	74	
Holton Iron Roofing Co. ....	73	
Hoops & Townsend. ....	58	
Hoover, J. A. ....	45	
Hoppea Mfg. Co. ....	73	
Hosford, John. ....	77	
Hotel Lucerne. ....	72	
Houchin, A. W. ....	60	
Hubbard, H. W. ....	74	
Hudson & Hazard. ....	36	
Hughes Steam Pump Co. ....	52	
Hunting, E. B. & Co. ....	74	
Hunt, Rodney, Machine Co. ....	30	
I	Indiana Machine Works. ....	51
Industry File Works. ....	4	
Ingersoll-Sergeant Rock Drill Co. ....	75	
Iron Clad Paint Co. ....	72	
Iron Mountain Route. ....	55	
Jackson & Woodin Mfg. Co. ....	52	
Jacksonville, Ala. ....	16	
Jarvis Engineering Co. ....	35	
Jeffrey Mfg. Co. ....	50, 74	
Jenkins Bros. ....	34	
Johns, H. W., Mfg. Co. ....	52	
Johnson, R. M. ....	60	
Johnson, Shryock & Co. ....	74	

[CONTINUED FROM PAGE 2.]

Wood-Working  
Machinery.

Wimship Mfg. Co. ....	Trevor Mfg. Co.
Snowden & Atiles. ....	S. Adams & Sons.
E. & B. Holmes. ....	Coe & Wilkes.
Frank & Co. ....	S. C. Forsthall Mch. Co.
P. Prybil. ....	Williamsport Mch. Co.
J. A. Fay & Co. ....	Sami, J. Shimer.
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Rose, Josiah. ....	Globe Machine Co.
Rouse, R. E. ....	Preble Mch. Wks. Co.
Keller, Sam. ....	G. H. Scanlan & Co.
Keppan & Halpin. ....	W. Ringier.
Kendall, Edward & Sons. ....	Empire Wringier Co.
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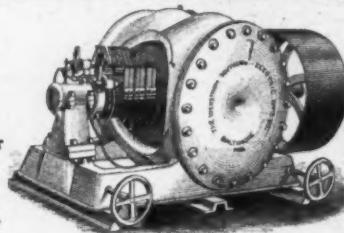
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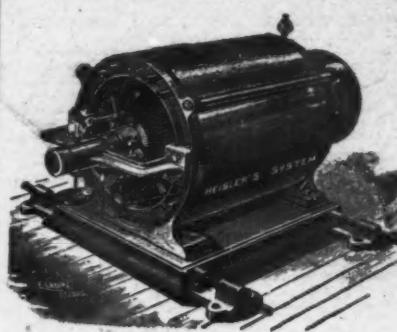
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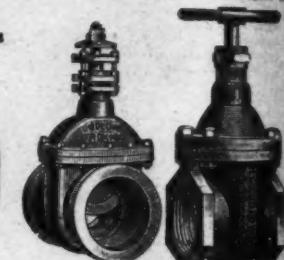
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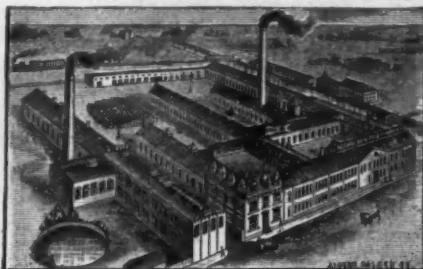
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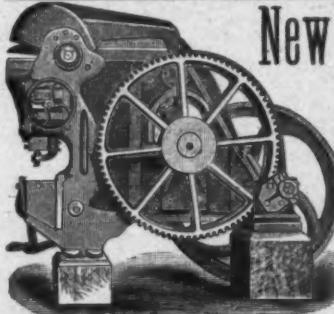
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